



Alaska DOT&PF Statewide Long Range Plan Update

**Transportation Stakeholder Group (TSG)
Meeting**

April 20, 2007

Welcome!





I. Introductions





Meeting Objectives

- A clear understanding of
 - Long range plan purpose
 - Plan update process
 - Your role
 - Baseline conditions and threats
 - What the plan can address



Agenda

- I. Introductions
- II. Alaska long range plan update process
- III. What we heard from you
- IV. Alaska's transportation future
Lunch break
- V. Financing transportation
- VI. Current situation
- VII. Wrap-up
- VIII. Next meeting dates



II. Plan Update Process

- Involves stakeholders and public in long range plan update (old plan-Vision 2020)
- Provide input to Alaska DOT&PF on
 - Needs to address
 - Priorities for the plan
- Addresses state's role in transportation statewide



Plan Update Process

The plan will

- Set policy direction
- Be system level
- Address all modes
- Address DOT&PF responsibilities as the owner

Will not be

- List of projects
- Unrealistic
- Too general

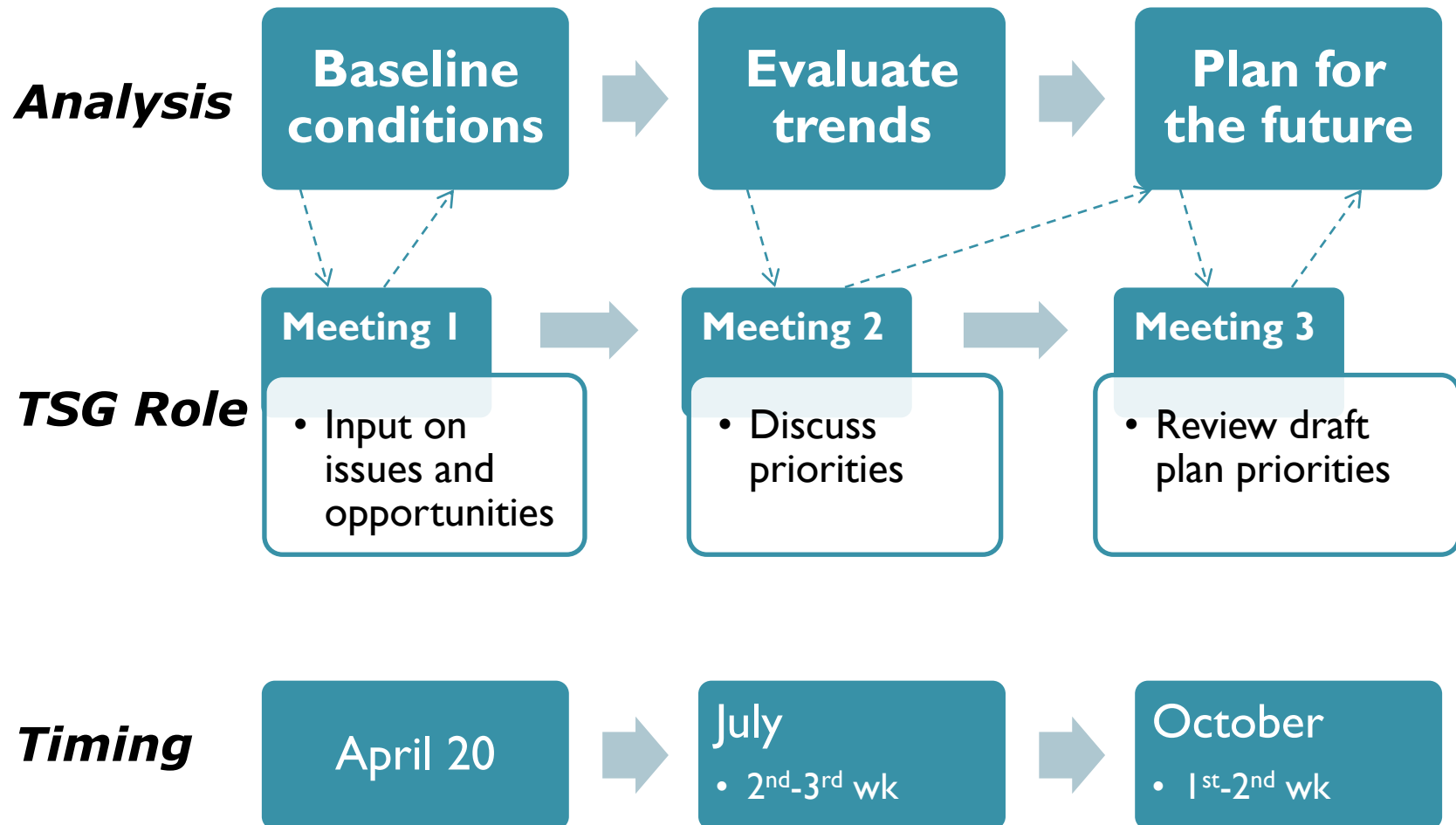


Plan Update Process

Statewide Planning Challenges

- Diverse needs and interests
- Many existing plans
- Avoiding project-specific orientation
- Ensure link from plan to implementation

Alaska's Transportation Future TSG Role





III. Your Input

Transportation Changes

- Overall improvements to the state's highways—particularly the NHS
- Lack of funding, increased Federal earmarks, and funding eligibility
- STIP has brought about more objectivity and less politics, while others noted that the process is cumbersome, takes away DOT's flexibility, and does not adequately address communities' transportation needs
- Lack of community input and tribal consultation, although one member said that agency planners are visiting rural areas more.
- Tourism needs seem to drive infrastructure projects
- Alaska Marine Highway System is important to the State not just the Southeast



Your Input

Most Important Trans. Issues

- Lack of adequate operations and maintenance funding
- Projects come with no plans for maintenance. The size of the ferry system operating deficit and the concern that it will be difficult to sustain in the long term
- Significant state general fund money spent on highways, airports and ferries, but not on transit
- The increase in construction materials and fuel costs are a concern in transportation project construction
- Others
 - Creating efficient freight corridors
 - Infrastructure improvements to support mega-projects
 - Earmarks deprive more important needs
 - Need for a statewide planning implementation strategy.
 - Consistently bumping and delaying of NHS projects



Your Input

Long Term Issues/Trends Affecting Transportation Demand

- Safety and maintenance, including safe and efficient movement of freight.
- Greater need for maintenance and rehabilitation.
- Increasing cost of energy
- Aging of society and urban sprawl
- Lack of funding and increased competition for funding
- Other comments
 - The need for alternative modes of transportation
 - Concern for the future of the ferry system and its sustainability;
 - Creating a state-funded construction program to allow the state to become less reliant on Federal funds
 - Increasing use of technology
 - Creating efficient inter-modal connections between water, rail, air, and road



Your Input

Long Term Issues Facing Local & State Govt. Trans. Agencies

- Insufficiency of capital and operating funding
- Need for a state-funded construction program
- Need for increased maintenance and operations funding into the future
- Better transit needs to be developed
- Local government needs to assume more responsibility for local roads
- Other comments
 - More realistic planning for large projects to avoid high maintenance costs;
 - Need to upgrade and maintain airport facilities;
 - Loss of institutional knowledge and difficulty in recruiting good staff;
 - Alaska's fuel taxes are not meeting the state's transportation needs.

Your Input

Top Priorities For Statewide Plan



- Solving the long-term operations and maintenance funding issue
- Making the ferry system more efficient and developing a clear system direction
- Strong coordination between potentially affected interests during planning - plans need to be realistic.
- The need for highway upgrades and connectivity
- The need to alleviate urban congestion and create inter-modal connectors
- Land use controls in conjunction with transportation development to control sprawl and contain transportation costs

Your Input

Changes to Current Trans. Planning, Funding & Decision Making



- Engaging more people in the process, from planning to conceptual levels, and in rural as well as urban areas
- Getting past the political and bureaucratic barriers to improve the system, especially the STIP process
- Elimination of earmarks would improve the process

Your Input

Other Comments



- “When political decisions are being made, unpredictability is the outcome”
- “... the State should consider keeping the TSG intact to provide input during the implementation of the Statewide LRTP”

IV. Alaska's Transportation Future



Planning for Alaska's transportation future



Alaska's Transportation Future Long Range Plan Role?



Northwest Alaska Transportation Plan Community Transportation Analysis

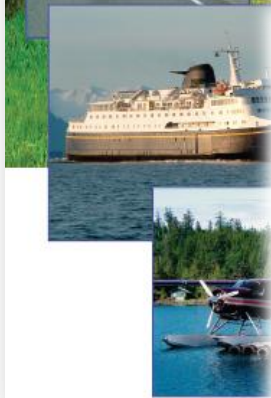
An Element of the
Alaska Statewide Transportation Plan



DECEMBER 2005



Vision 2030

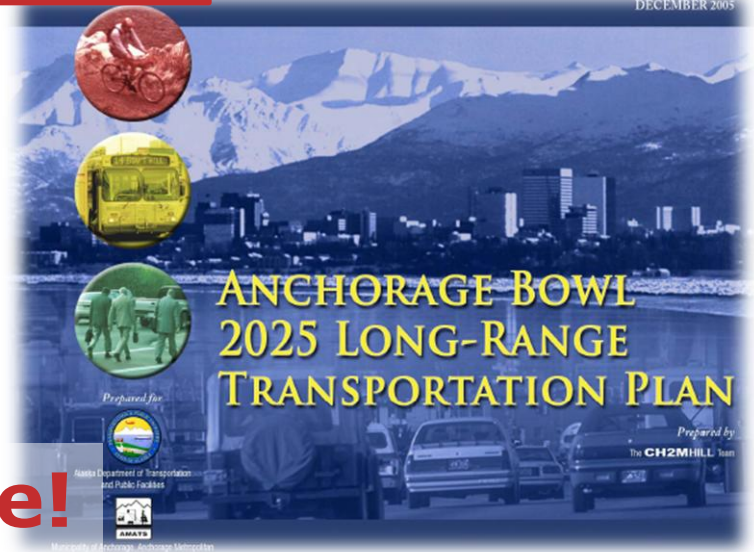


SOUTHWEST ALASKA TRANSPORTATION PLAN Revised

A Component of the Alaska Statewide Transportation Plan



Prepared for the
Alaska Department of Transportation and Public Facilities



...and there are more!

Alaska's Transportation Future Long Range Plan



Current Plans

- Many projects
- Hard to fund
- General goals
- Costs understated

New Long Range Plan

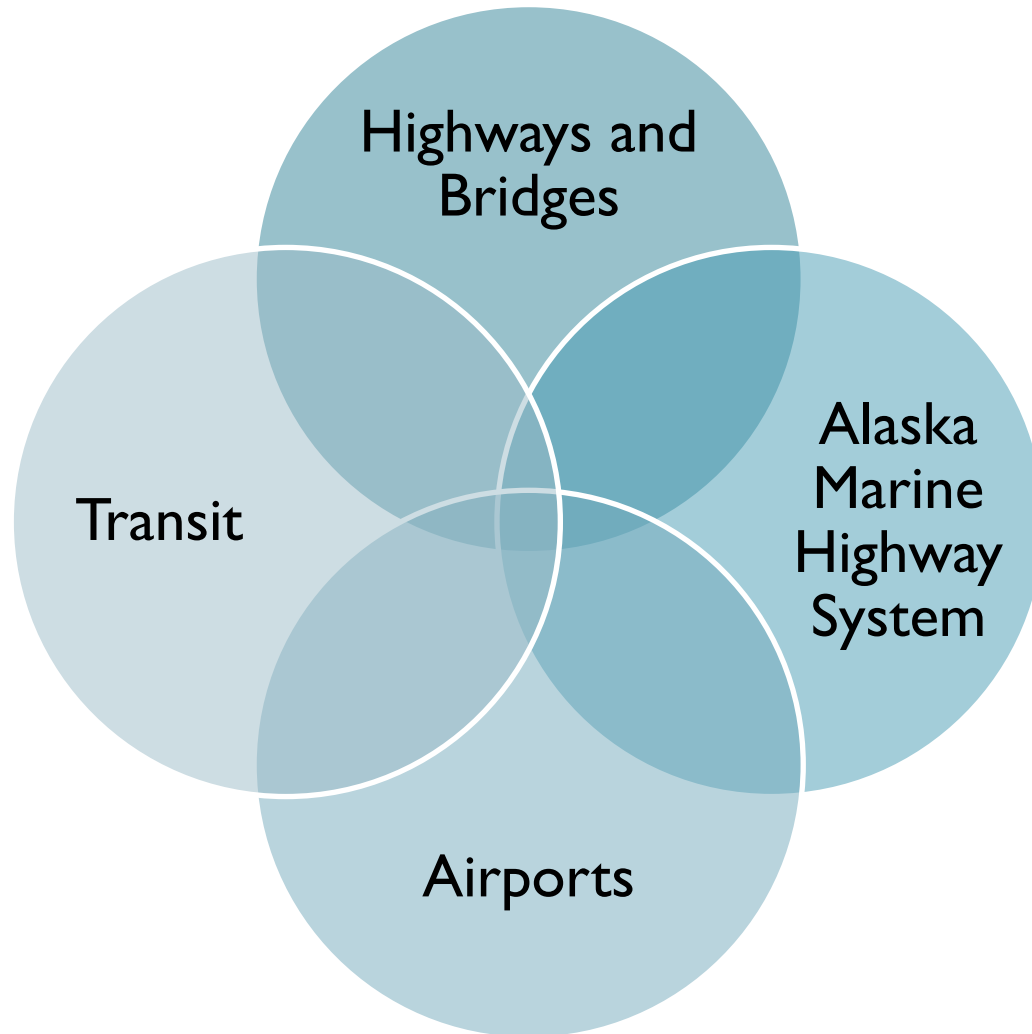
- Comprehensive system-level review of needs:
 - Maintenance and operations
 - Life cycle management
 - Development
- Realistic appraisal of funding
- Make hard choices
- Set priorities

Alaska's Transportation Future Long Range Plan Will



- Provide statewide focus
- Bring together existing plans
- Address “Cost of ownership”
- Make link to implementation

Alaska's Transportation Future Plan Addresses State's Role



Alaska's Transportation Future Overall Analysis Approach

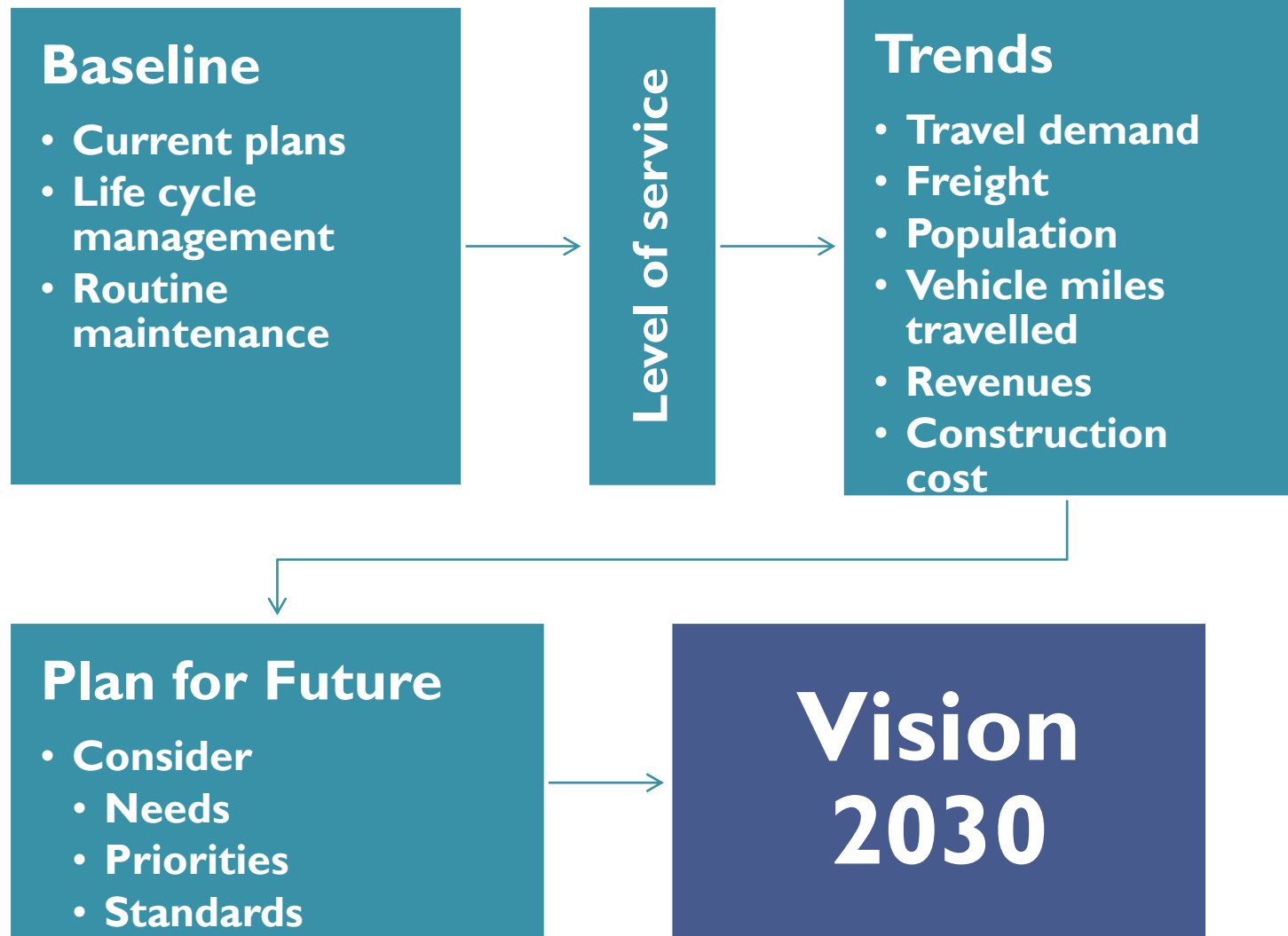


- How do we get there?
 - Elements of the plan
 - Approach summary



Alaska's Transportation Future

Overall Analysis Approach: Summary



Alaska's Transportation Future

Analyzing Statewide Needs



System Development

New Construction

Urban Mobility

Safety

Life Cycle Management

Preservation

Rehabilitation

Routine Maintenance

Snow and Ice Removal

Other

Alaska's Transportation Future

Analyzing Statewide Needs



System
Development

Projects
specified
in
existing
plans

Life Cycle
Management

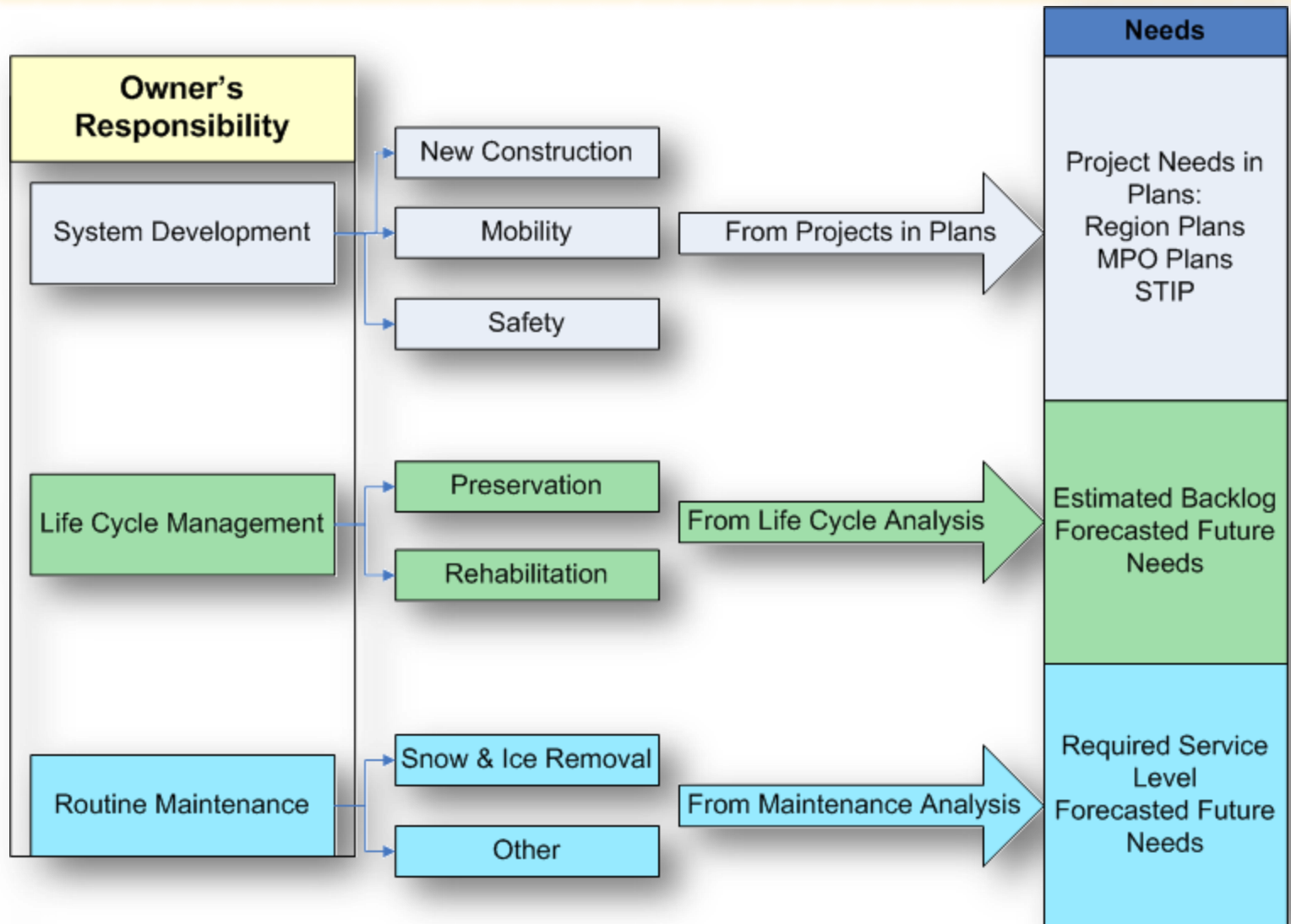
Analysis
model

Routine
Maintenance

Analysis
model

Alaska's Transportation Future

Analyzing Needs: Highways/Bridges



Lunch Break





V. Financing Transportation

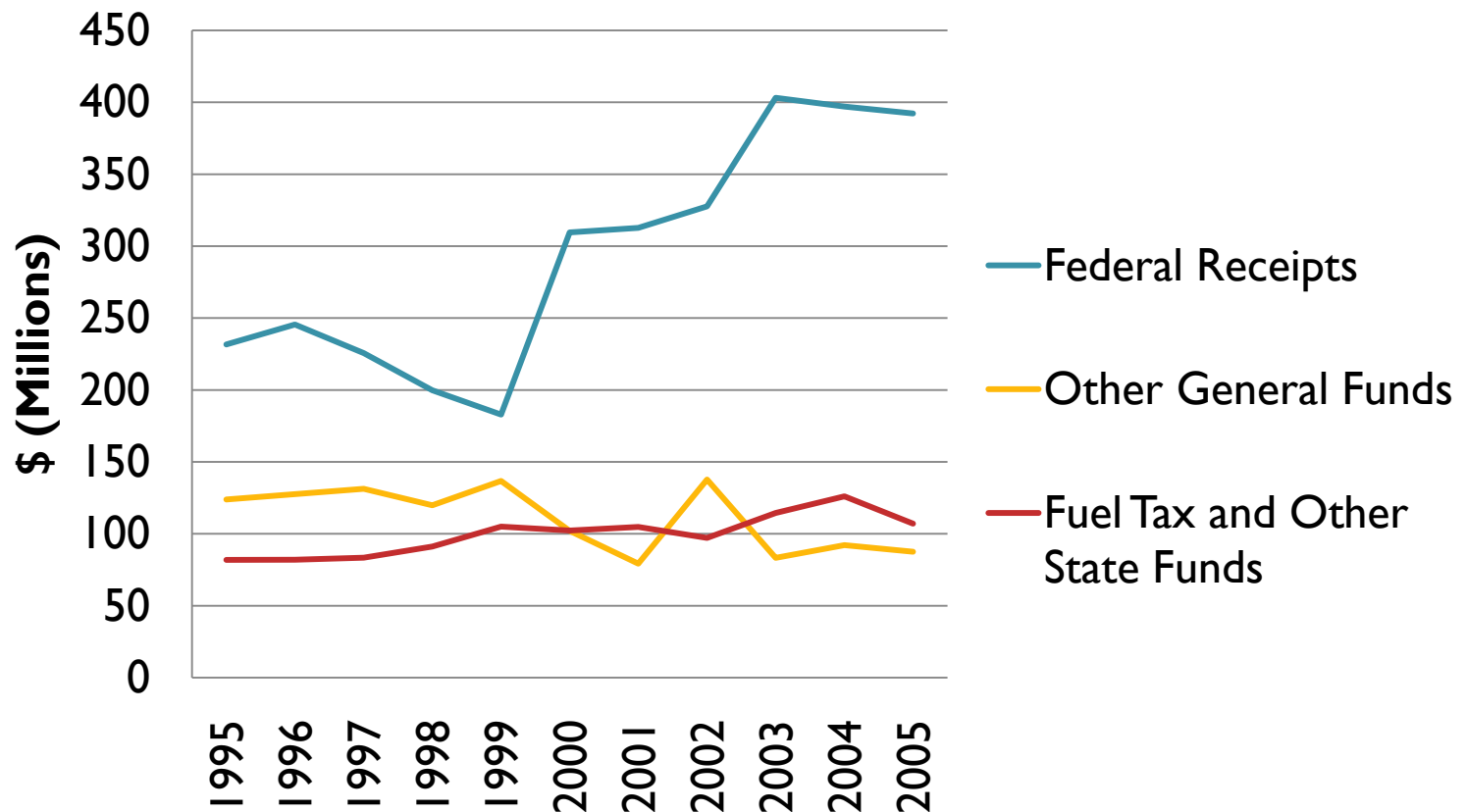
- Alaska DOT&PF Revenues
 - Federal program
 - State funds
 - Motor fuel tax
 - General fund
 - Operating revenue (AMHS)



Financing Transportation Historical Revenues

- High reliance on Federal funds

Historical Revenues



Financing Transportation State Dependence



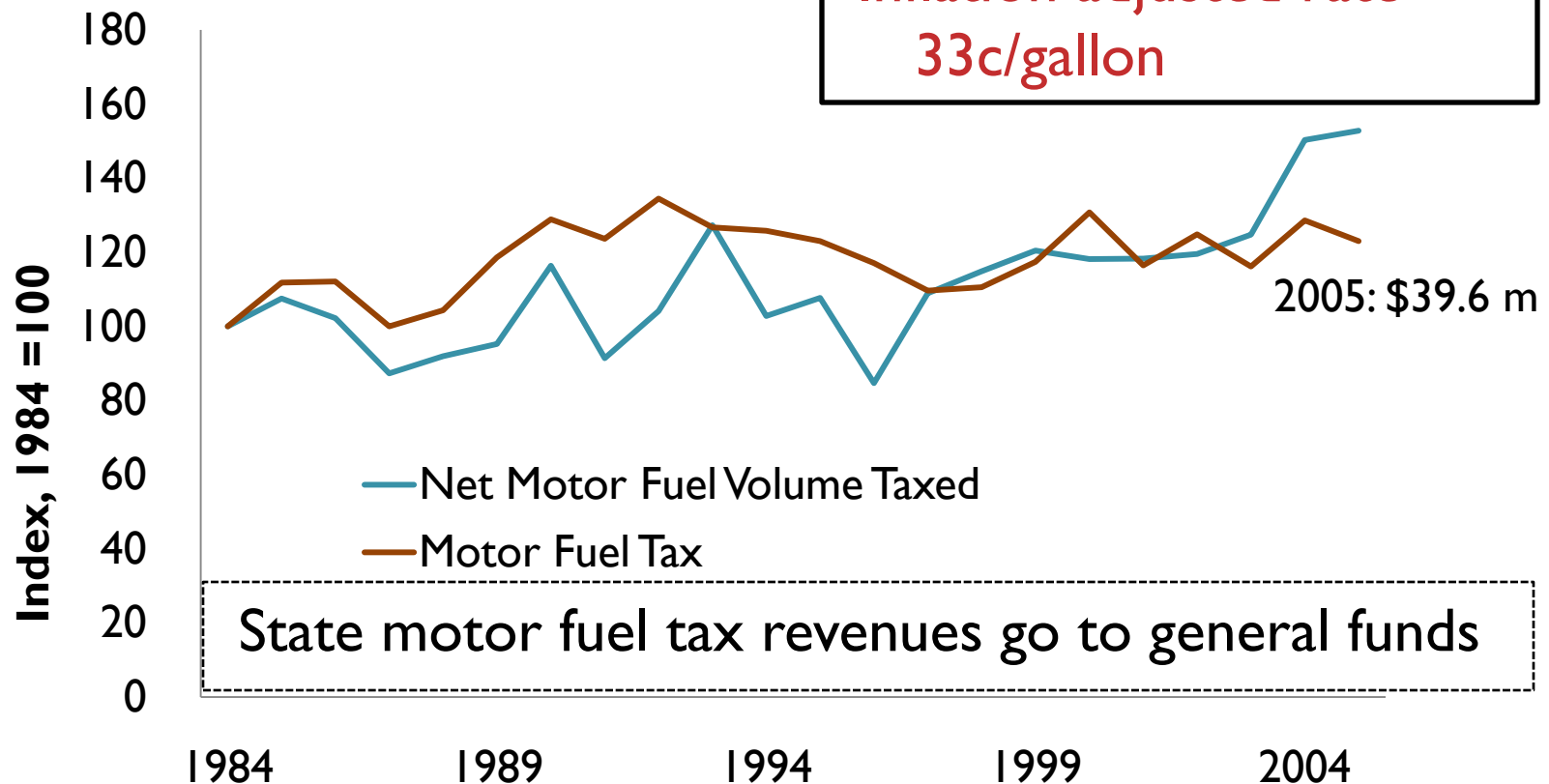
- No dedicated highway fund
- Alaska DOT&PF dependent on general funds
- Motor fuel tax is a general fund revenue source



Financing Transportation

State Motor Fuel Tax

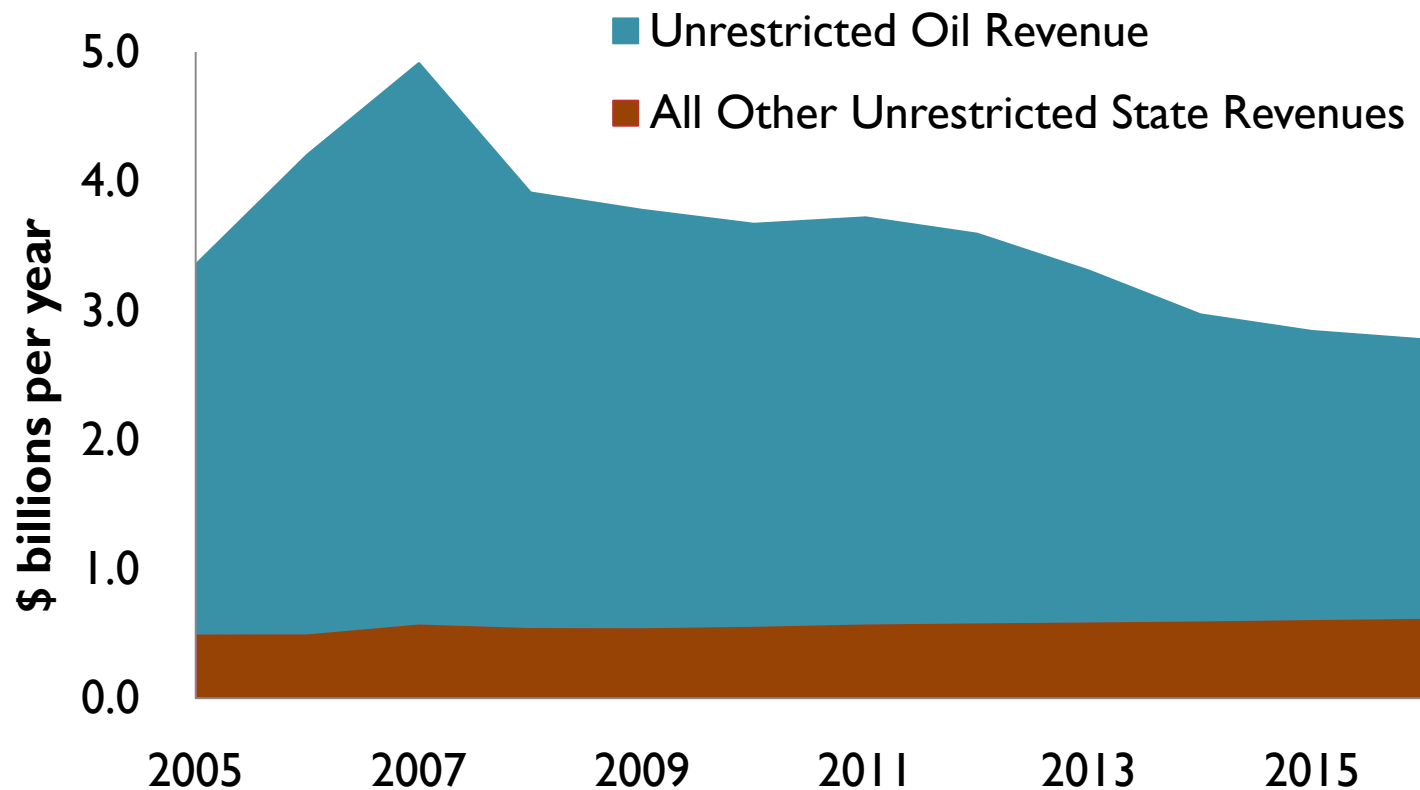
- Current rate (8c/gallon) initially put place in 1961
- Lowered to 7c/gallon in 1964
- Raised to 8c in 1970



Financing Transportation General Funds



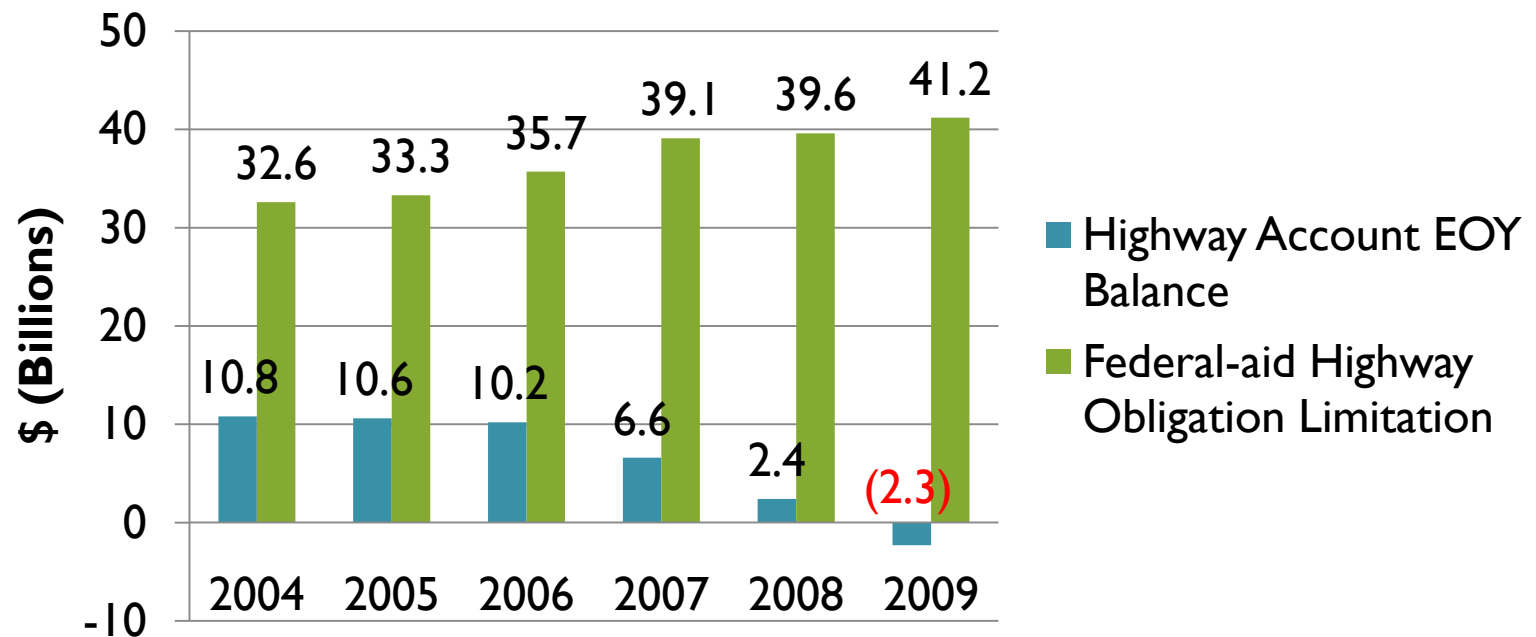
- Future potential for General Funds is limited





Financing Transportation Future Federal Program

- Federal trust fund forecast to go into deficit
- Alaska receives the highest federal transfers per capita of any state - bears the highest risk of federal deficit reduction of any state.

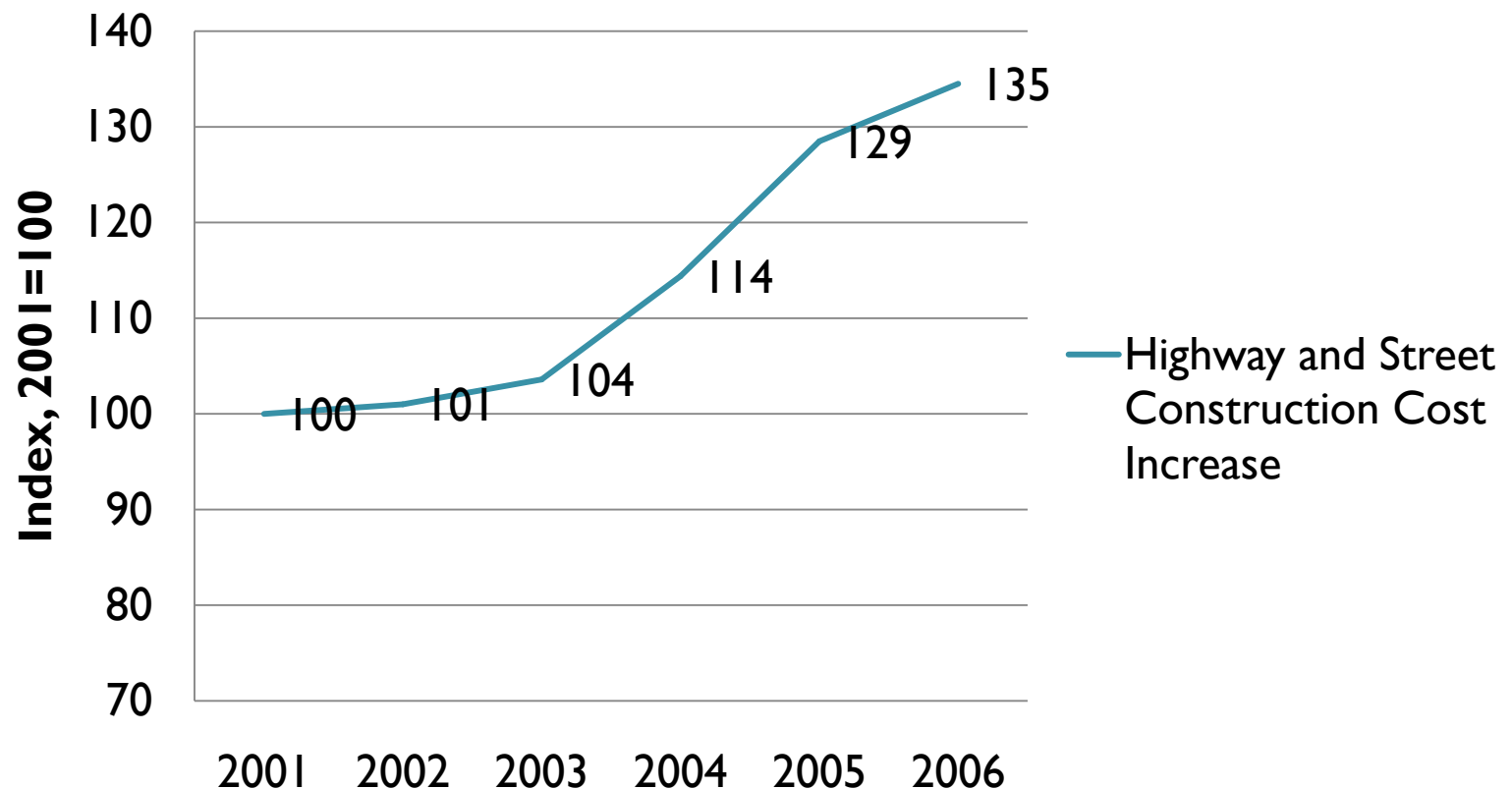


Financing Transportation

Other Considerations



Highway and Street Construction Cost Increase

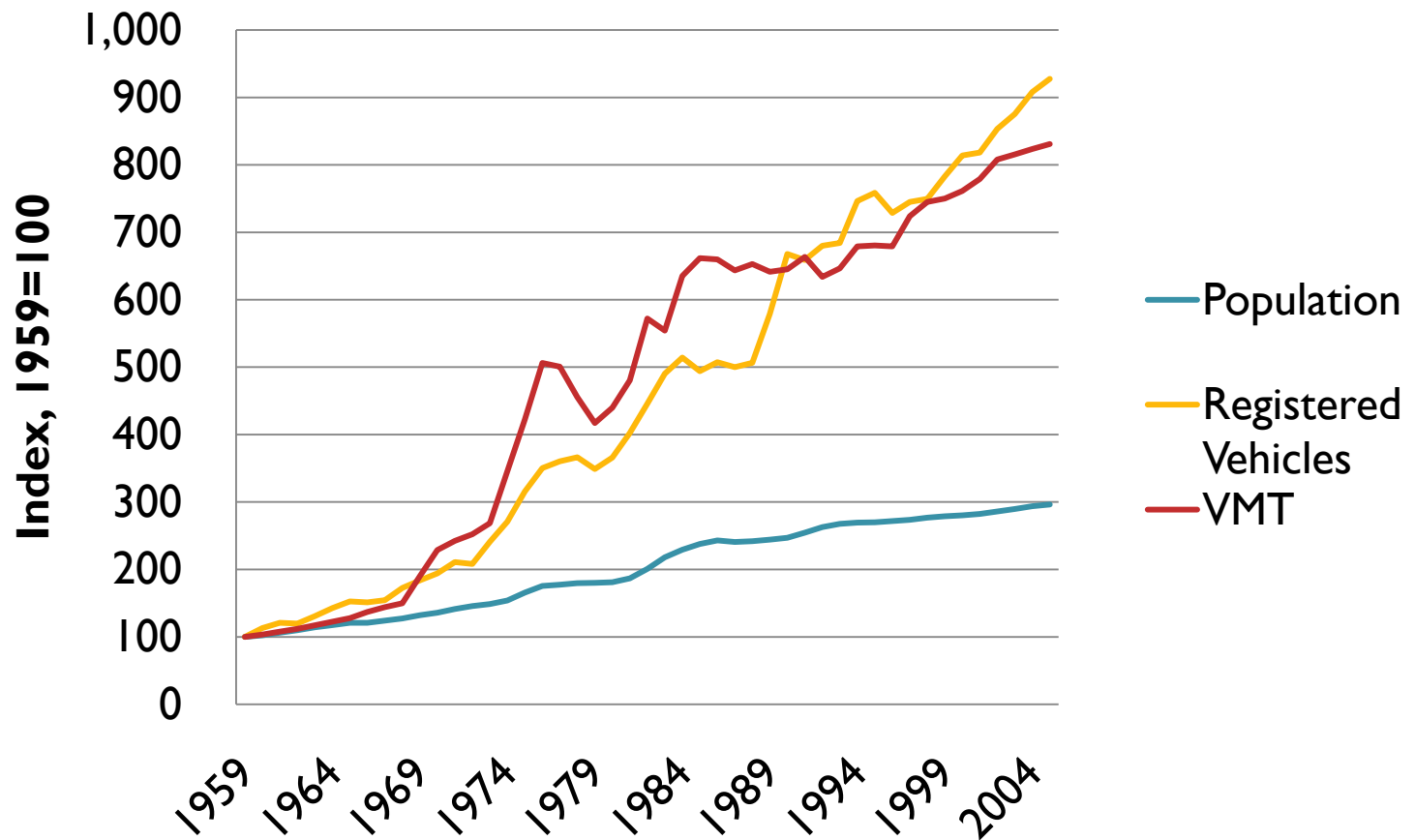


Financing Transportation

Other Considerations



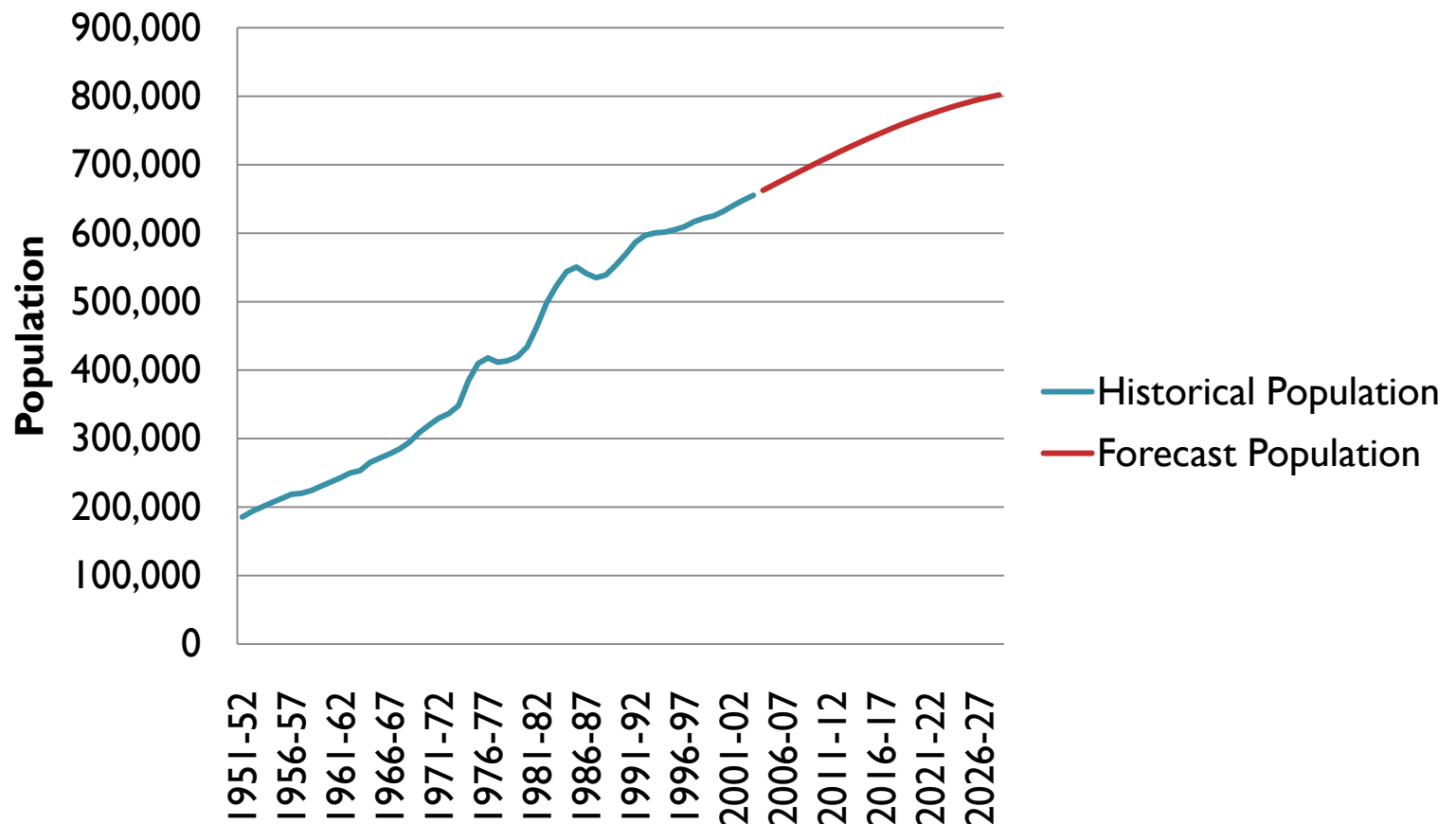
Trends



Financing Transportation Other Considerations

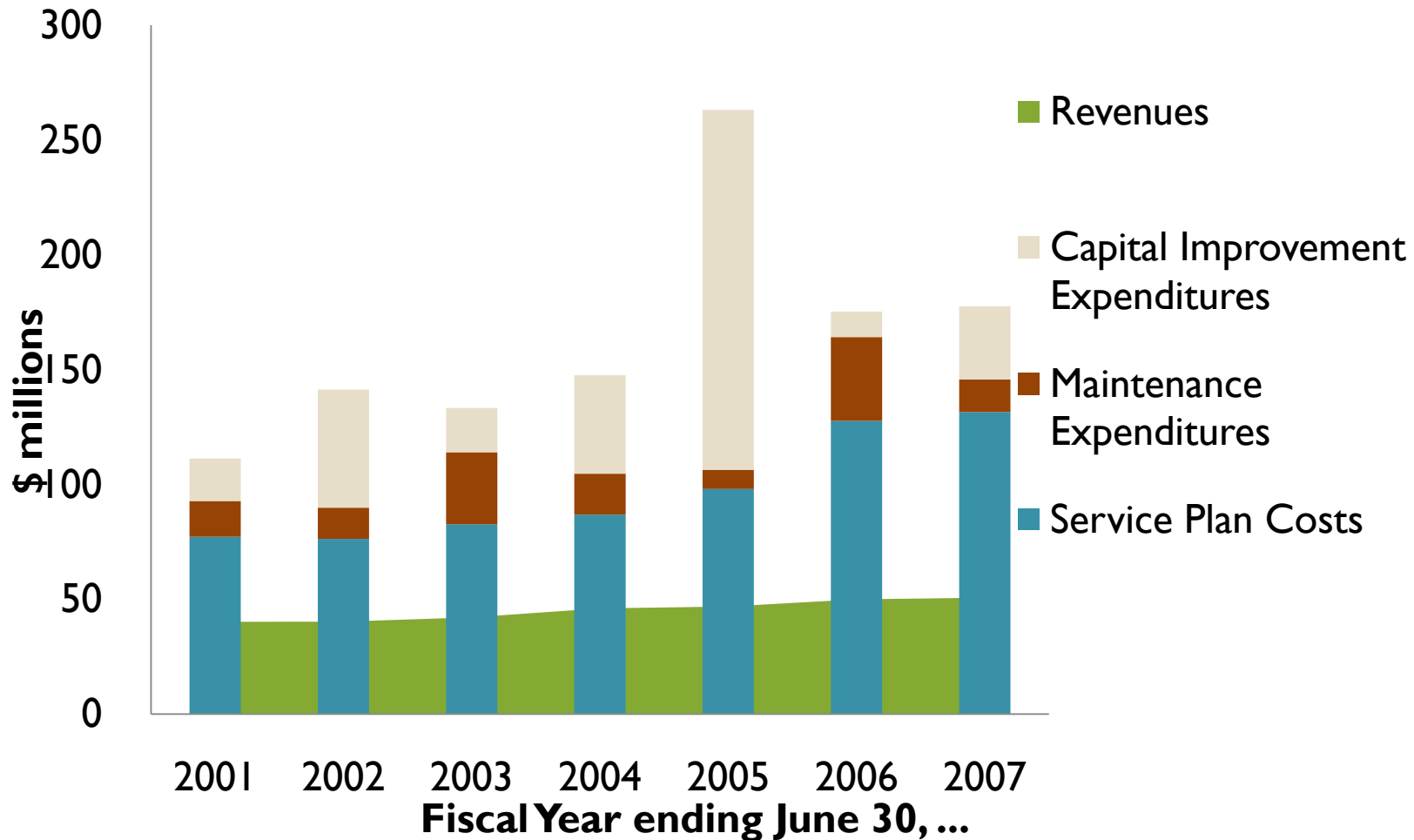


State of Alaska: Population



Source: Alaska Department of Labor
(<http://almis.labor.state.ak.us>)

Alaska Marine Highway System Financial Trends



Financing Transportation Financing Realities



- Relying on Federal program growth is risky
- Prognosis for general fund revenue as highway funding source is not good
 - State running out of oil revenues – without gap pipeline (earliest 2015), state revenue will decline
- Motor fuel tax yield per cent low

Financing Transportation Financing Realities (Contd.)



- Limited applicability of financing strategies and mechanisms being pursued in rest of the country
 - User fees limited due to high costs of highways, few users, and heavy industrial component
 - National trends for revenue bonds and tolls not viable
 - State building new corridors for economic development: rest of the country adding capacity to address congestion

Financing Transportation Statewide Planning Implications



- Ability to build as planned at risk
- Large and growing backlog of lifecycle management needs
- Long-range plan can establish priorities
- What level of funding should we plan for?



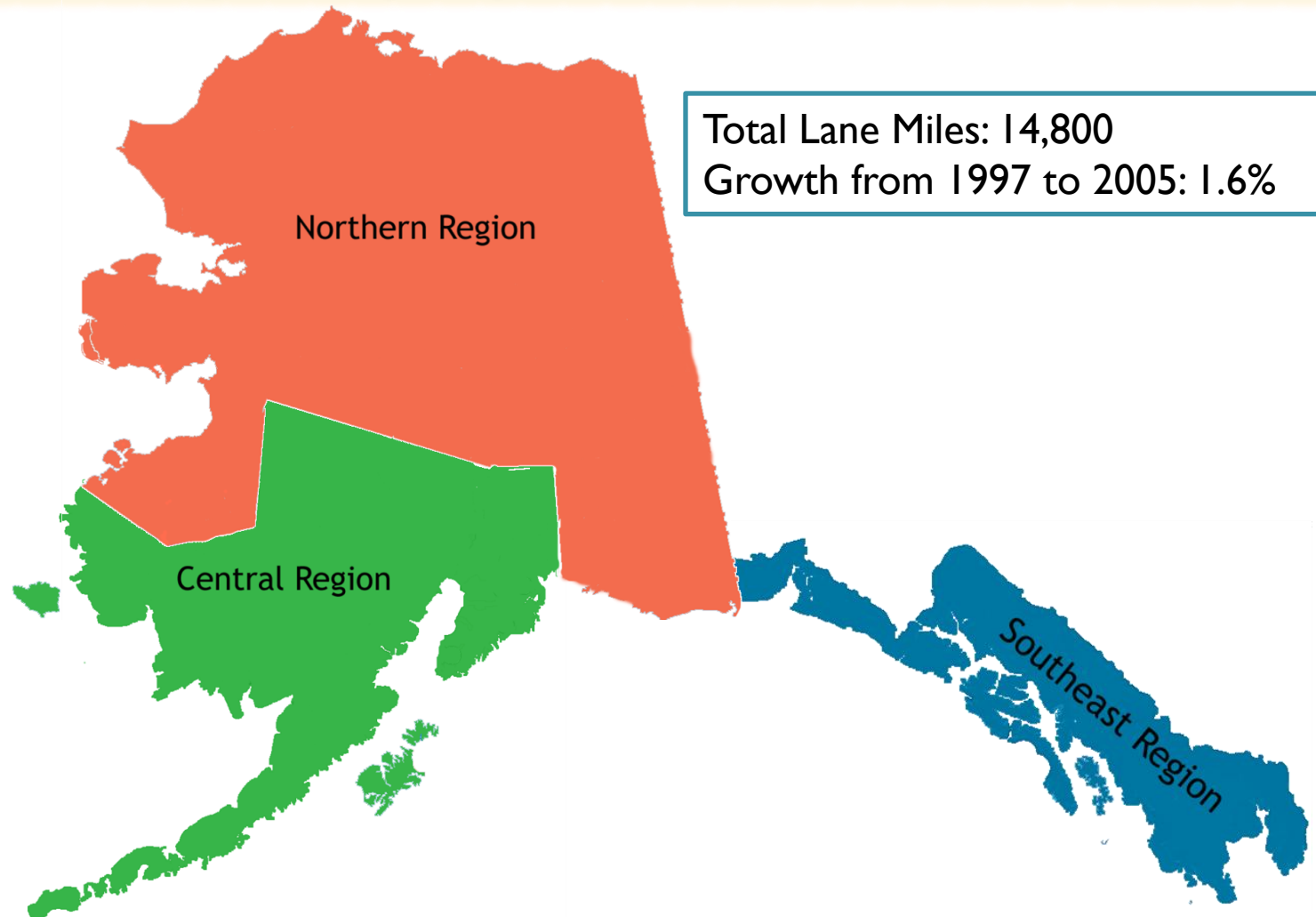
Next Steps

- Identify finance options

Financing Transportation Viable Finance Solutions



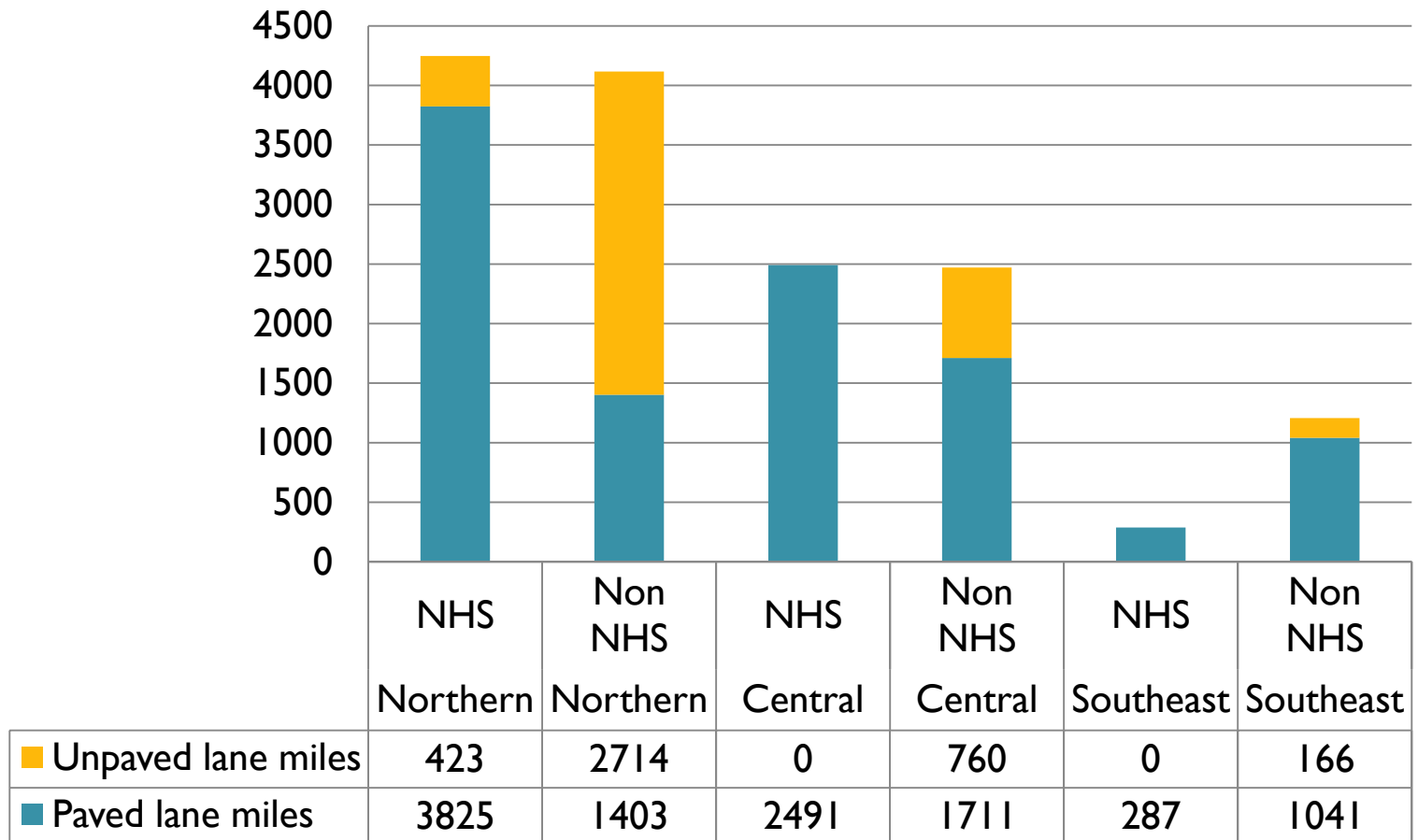
VI. Current Situation Highway System



Highway System Baseline Data



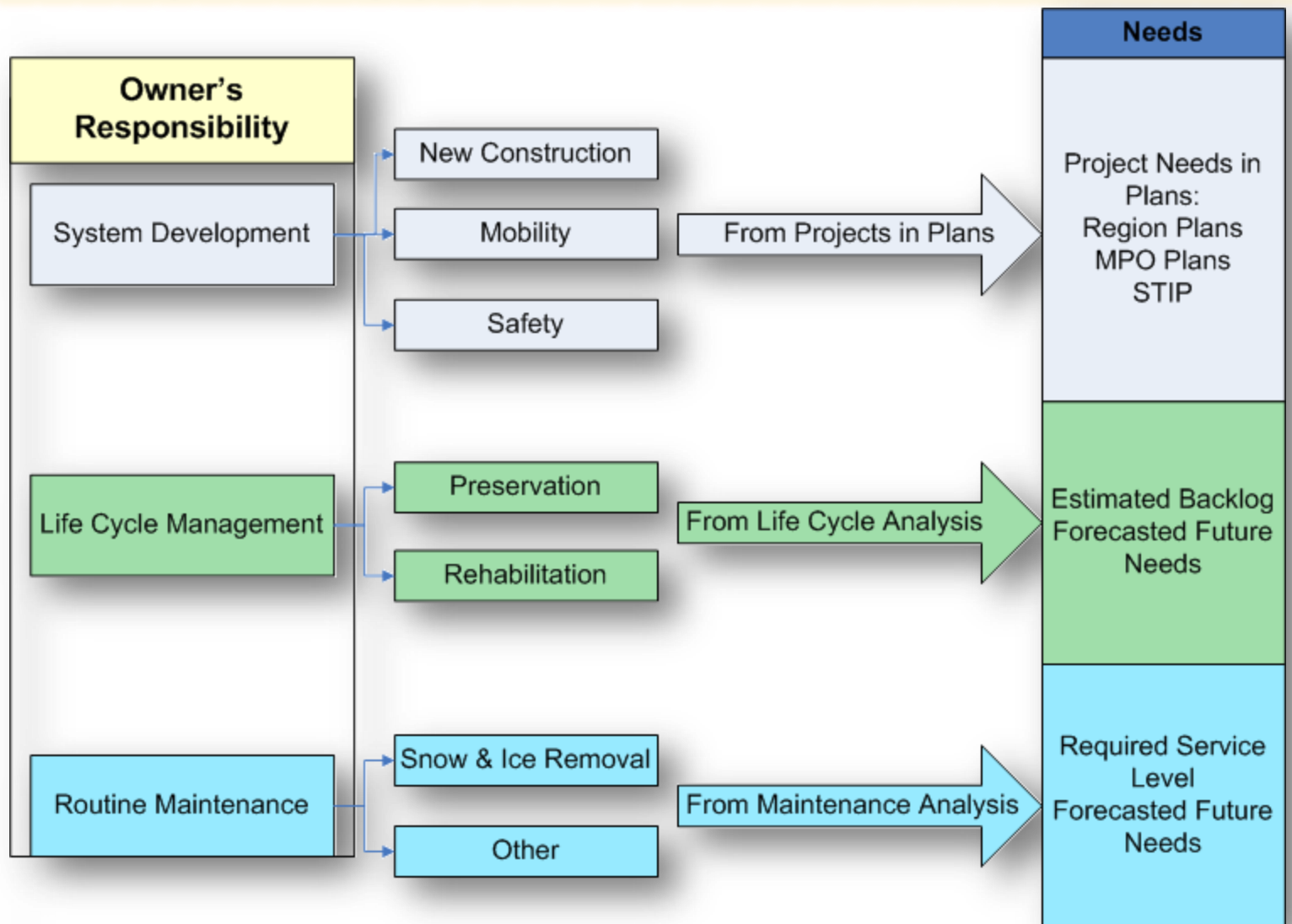
Paved and Unpaved Lane Miles



NHS: National Highway System

Non-NHS: All roads owned/maintained by DOT&PF

Highway System Analysis Approach



Highway System Routine Maintenance



What is
routine
maintenance?

- Snow and ice removal
- Mowing
- Pothole patching

Why is it
important?

- Safety
- Mobility
- Extends pavement life

How is it
funded?

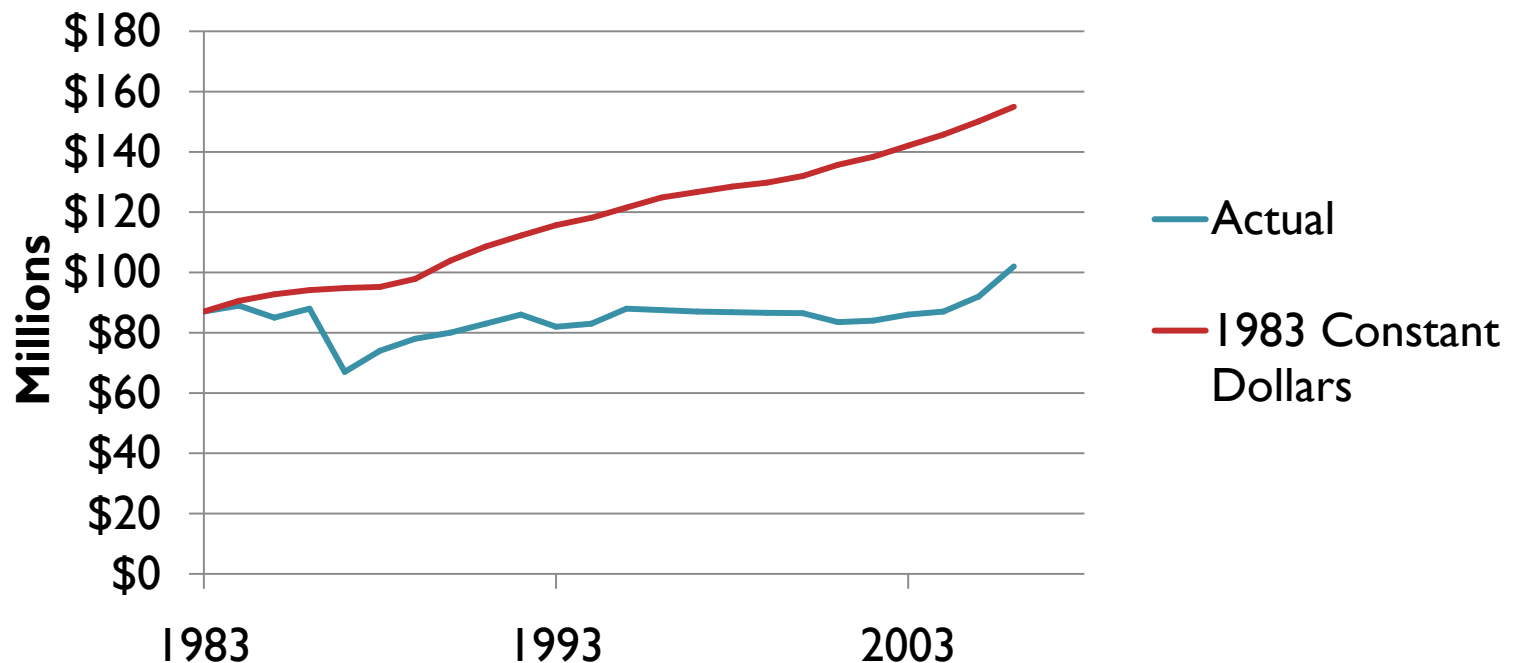
- General fund
- Some pavement work federal-aid eligible

Highway System Routine Maintenance



- Conservative gap estimate:
 - Increase in lane miles, material costs, environmental compliance, etc. not accounted for

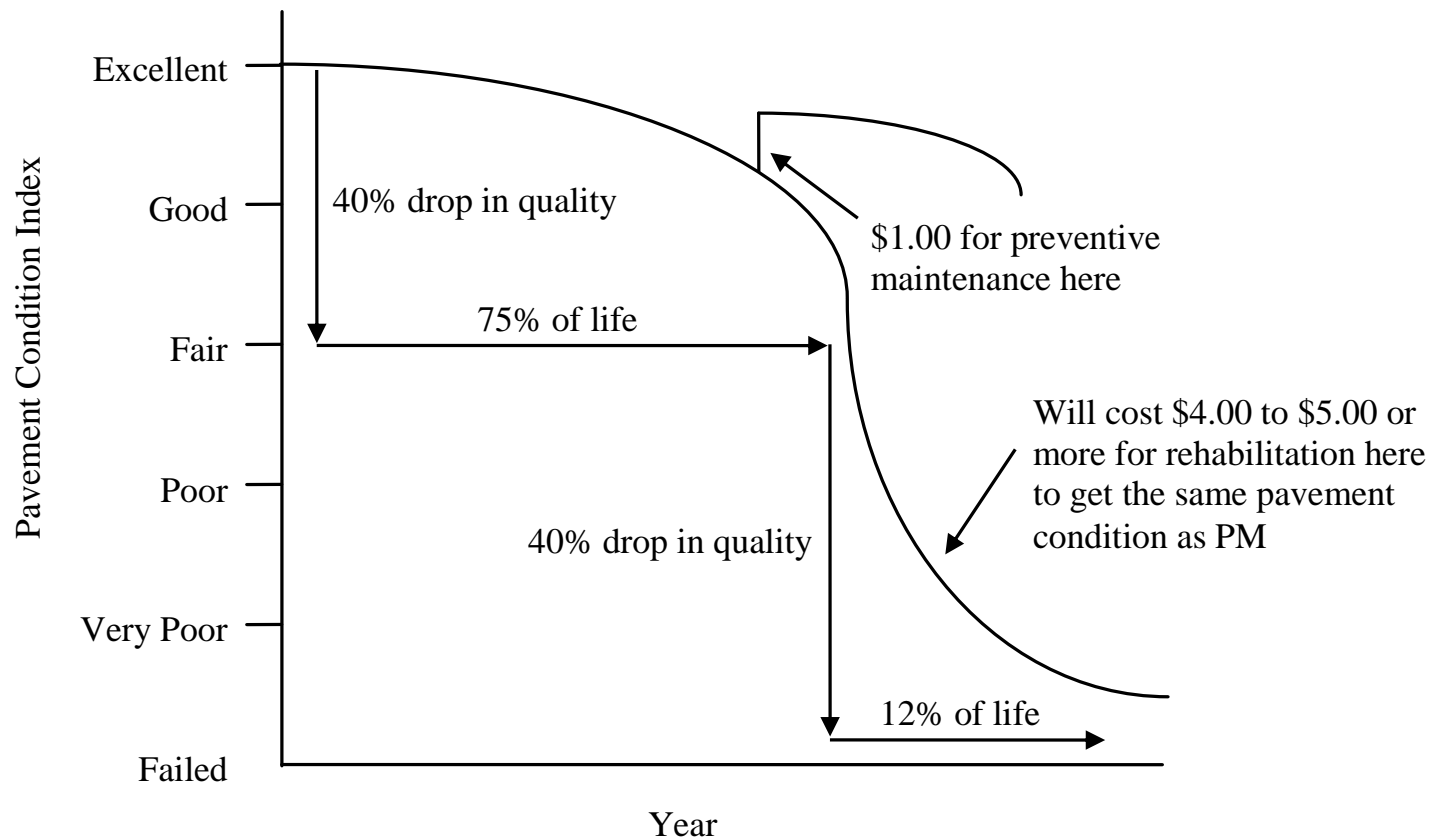
Maintenance GF Budget





Highway System Life Cycle Management

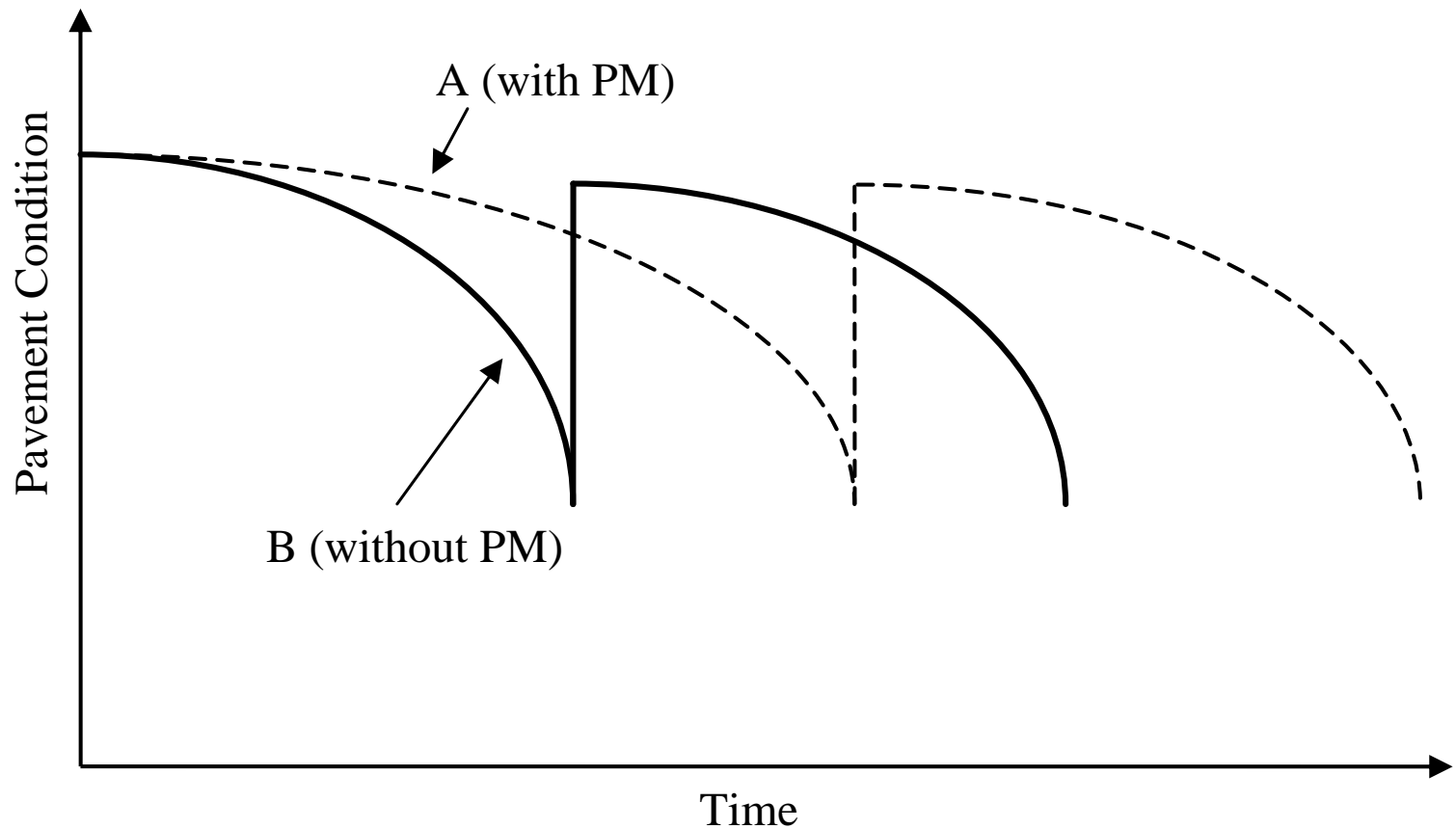
- Life cycle management: The management of assets (roads, bridges, etc.) and applying proper treatment cycles to reduce the total cost of ownership



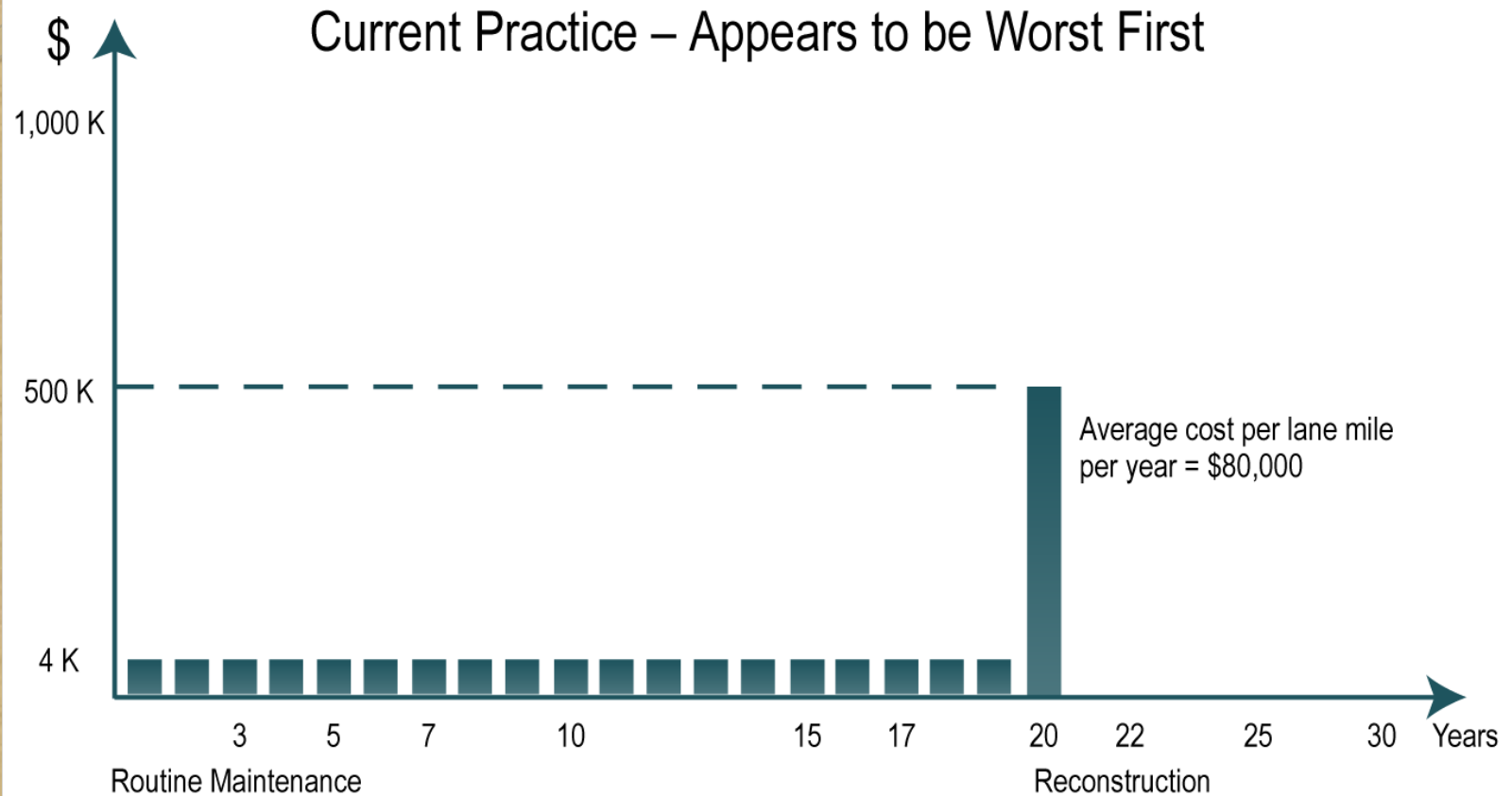
Highway System Life Cycle Management



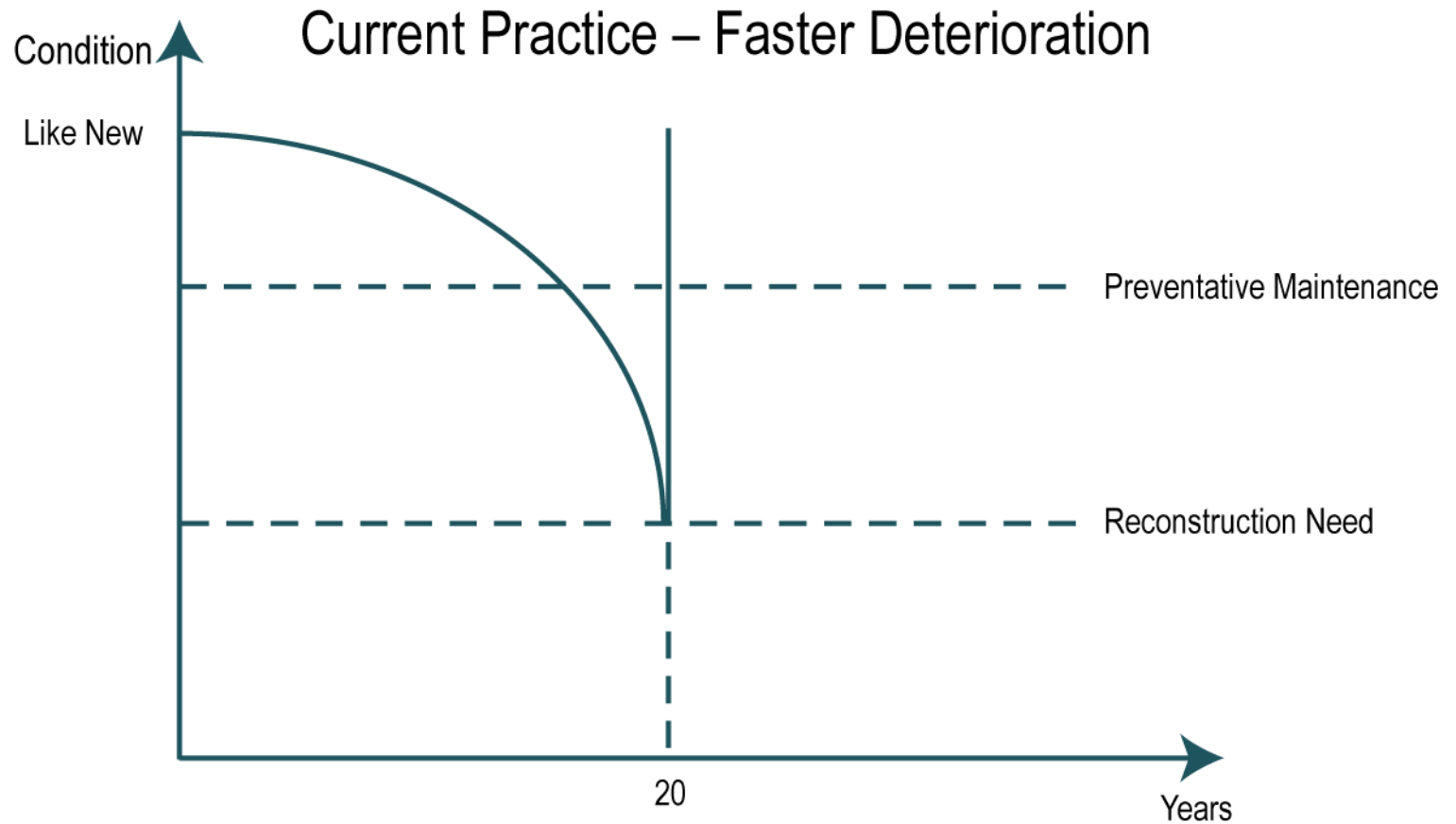
- Pavement Deterioration With and Without Preventive Maintenance



Highway System Current Practice

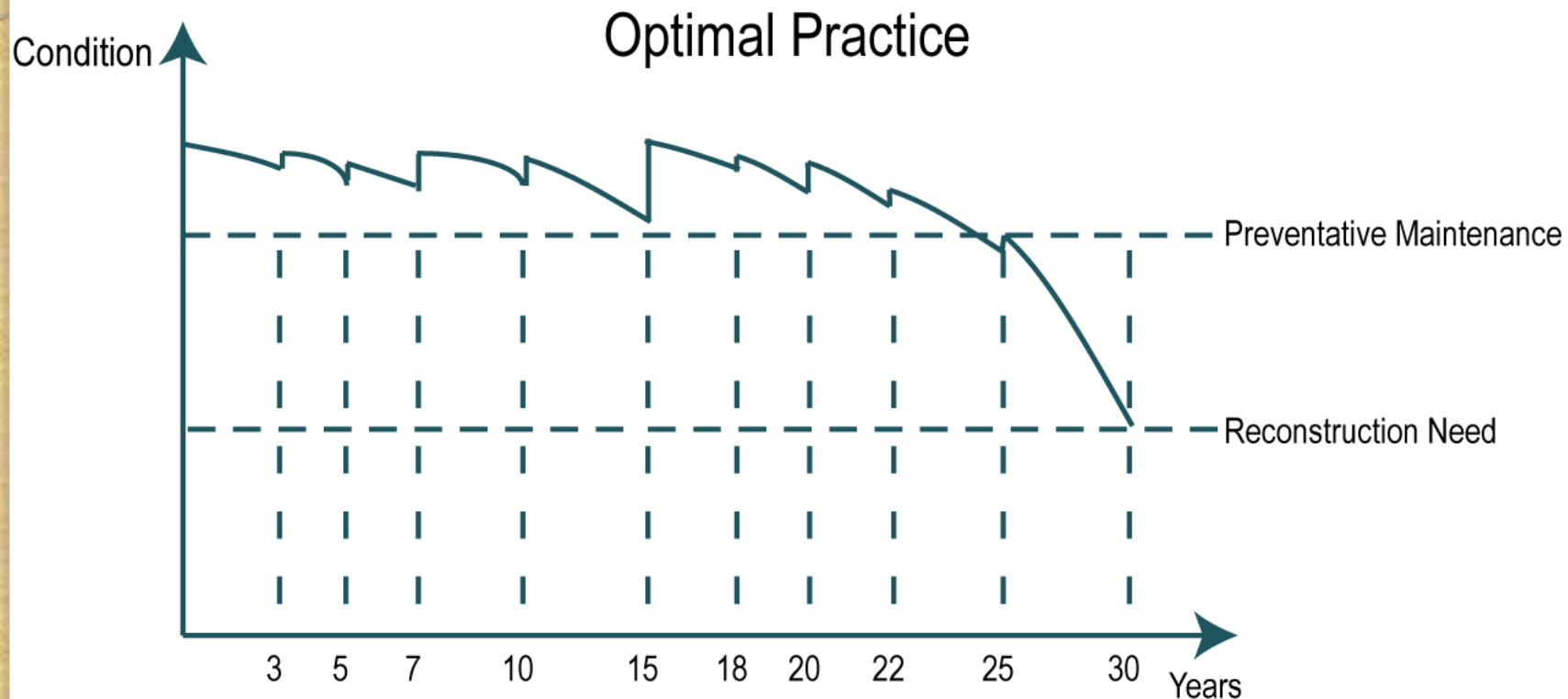


Highway System Current Practice



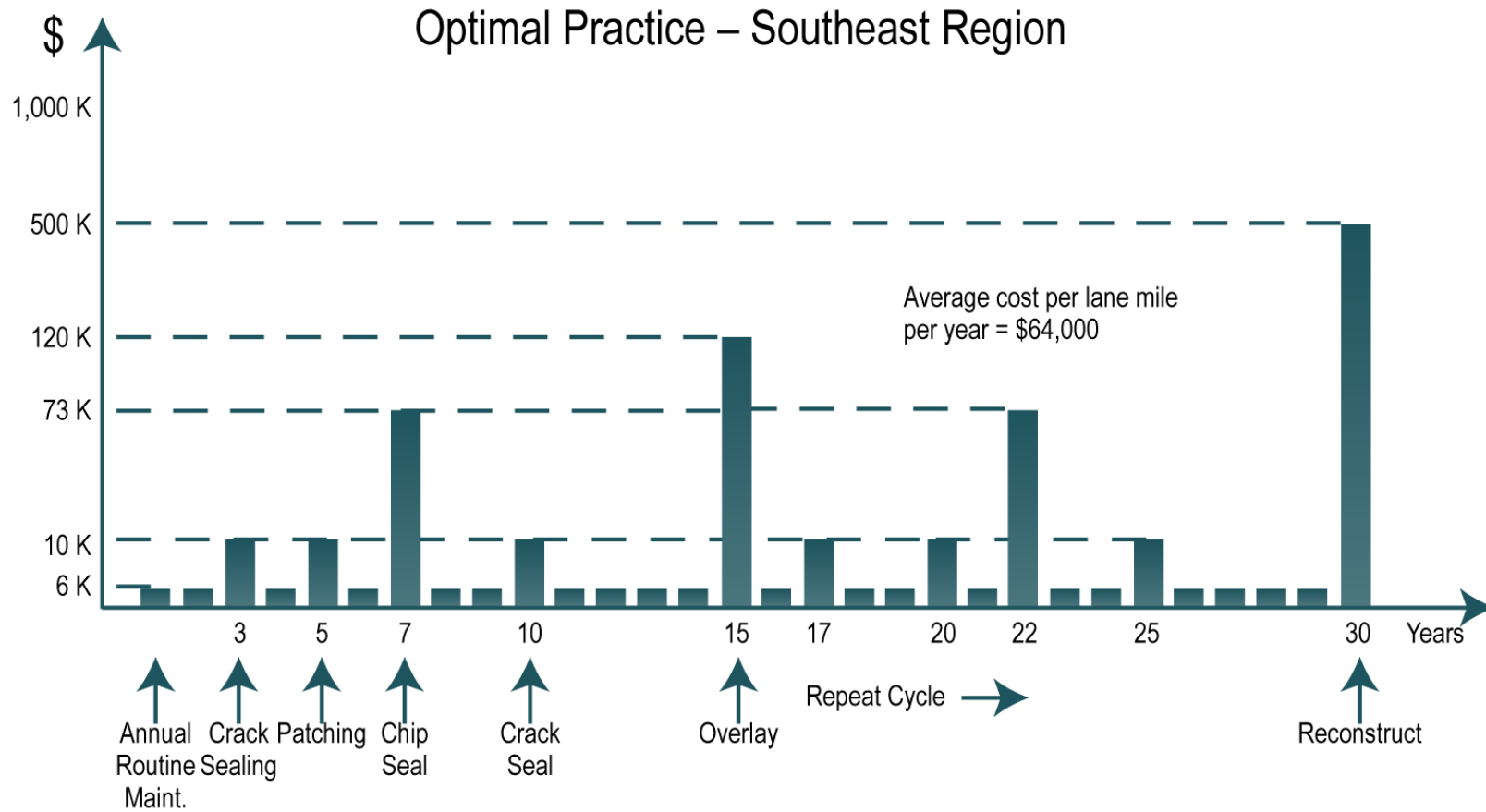
Highway System

Optimal Practice: Reduces Cost



Highway System

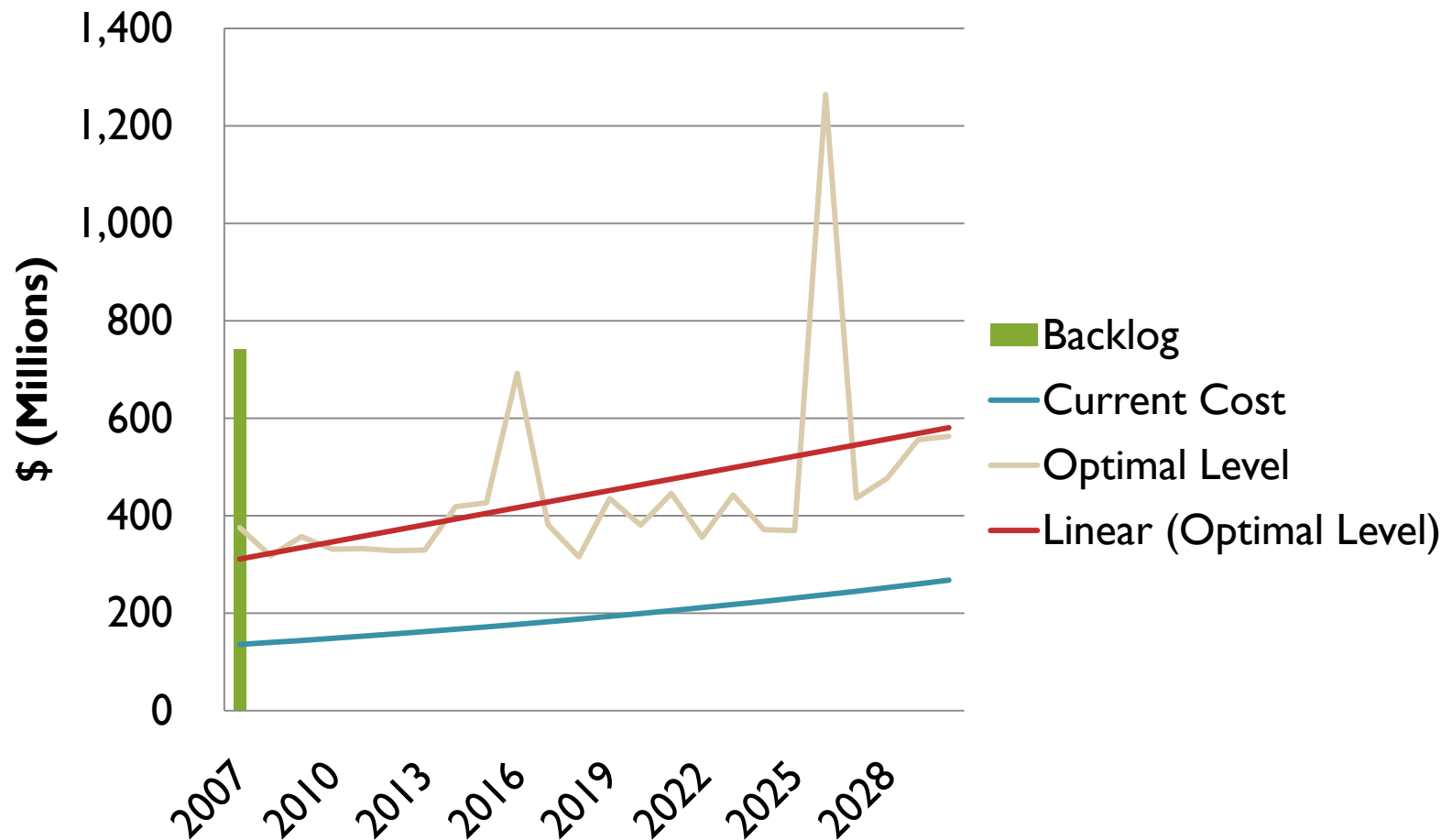
Optimal Practice: Reduces Cost



Highway System Life Cycle Management: Funding Gap



Life Cycle Management: Gap





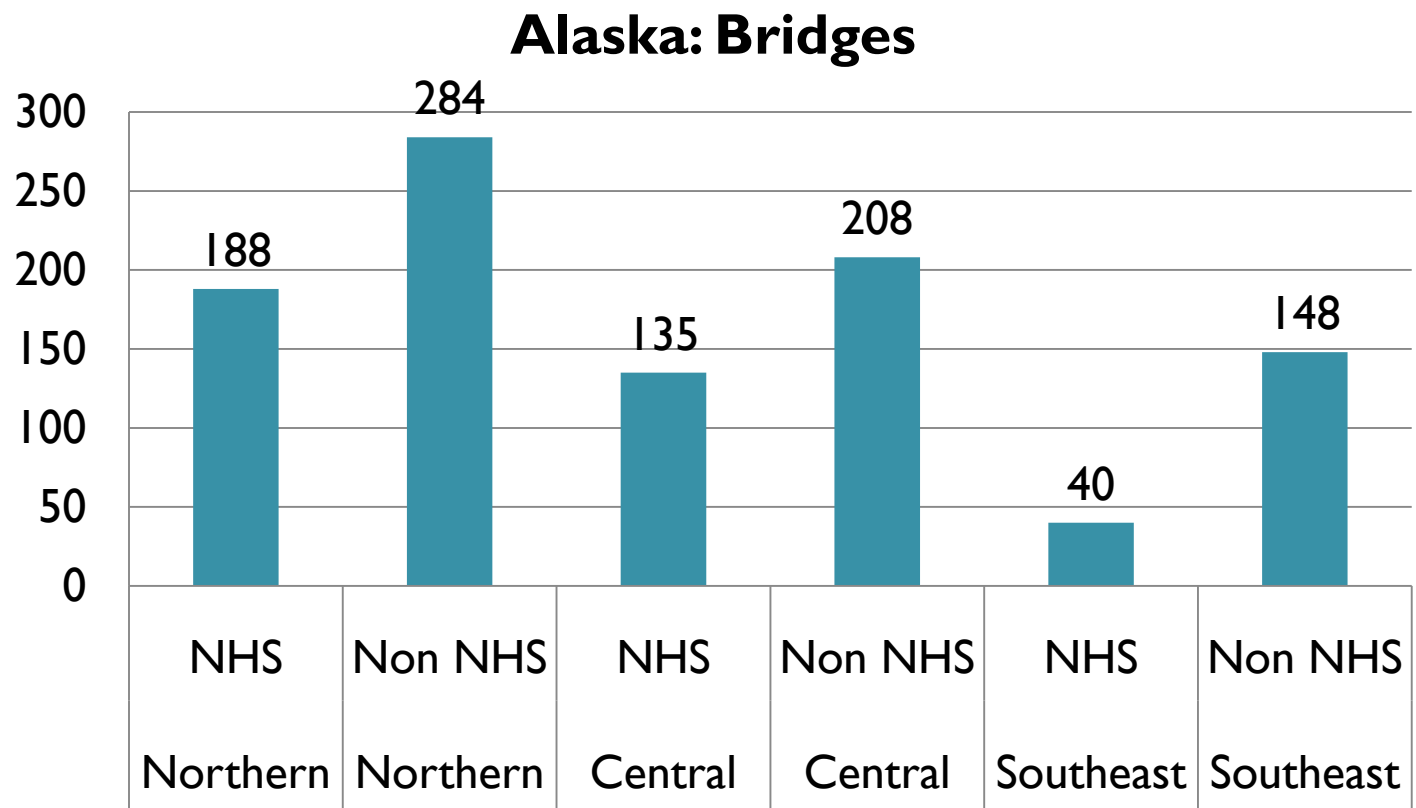
Highway System Life Cycle Management: Implications

- Rapidly growing needs
- “Worst first” means backlog will keep growing
- At risk!

Highway System Bridges



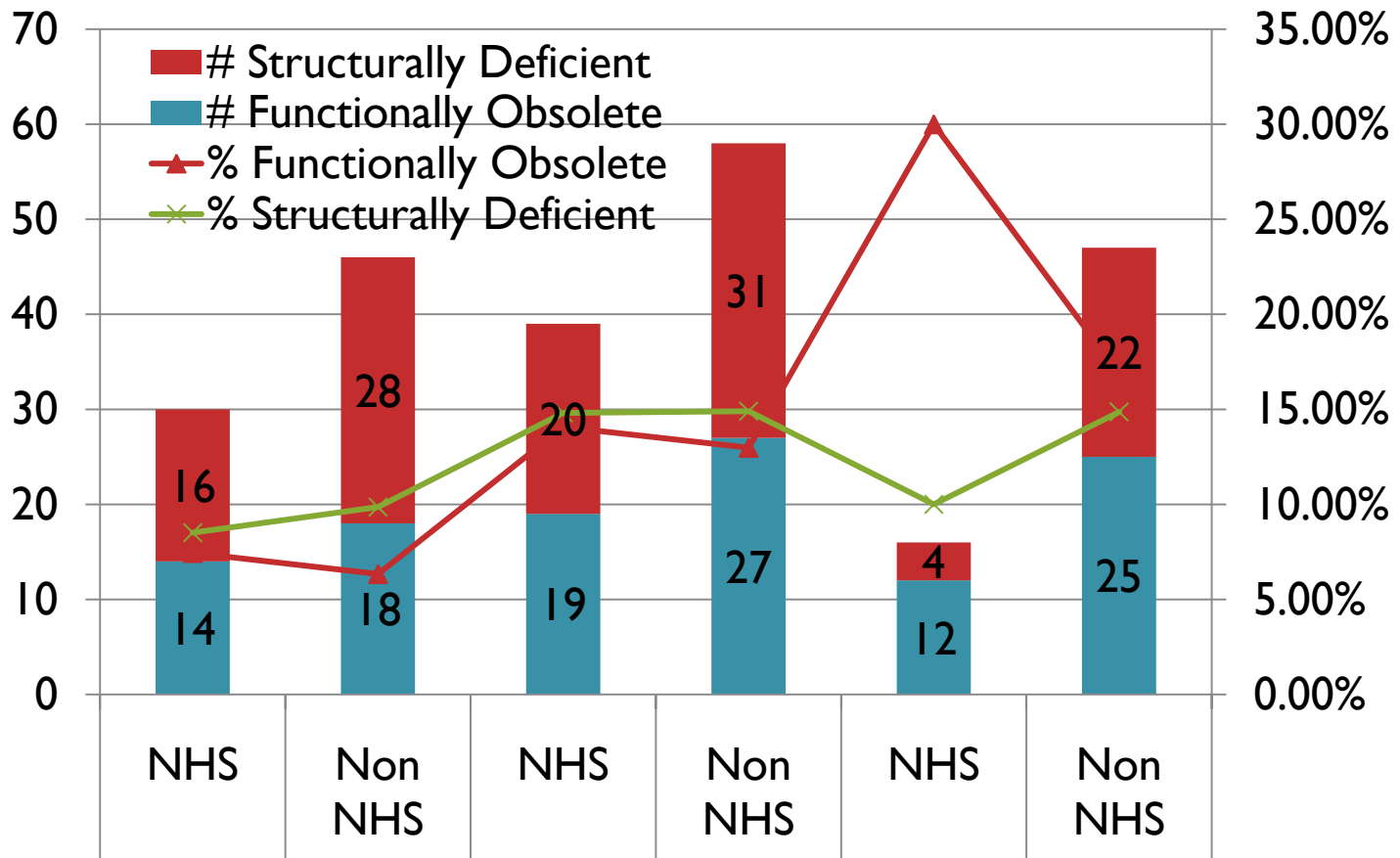
- Similar methodology for bridges as highways





Bridges

Baseline and Backlog



Bridges Life Cycle Management



- Analysis to be completed
 - Will quantify backlog
 - Treatment cycles and associated costs



Highway System Development Needs in Plans

- Projects listed in approved plans

Regional Plans: \$1.72 b

MPO Plans: \$4.49 b

STIP: \$3.21 b

Grand Total: \$9.42 b

Highway System Development Projects in Plans



Regional Plans

- Y-K Delta: \$61 m
- Northwest Alaska: \$465.50 m
- Southwest Alaska: \$145.21 m
- Southeast Alaska: \$1.04 b
- Interior Plan: TBD
- TOTAL: \$1.72 b

STIP

- TOTAL: \$3.21 b

MPO Plans

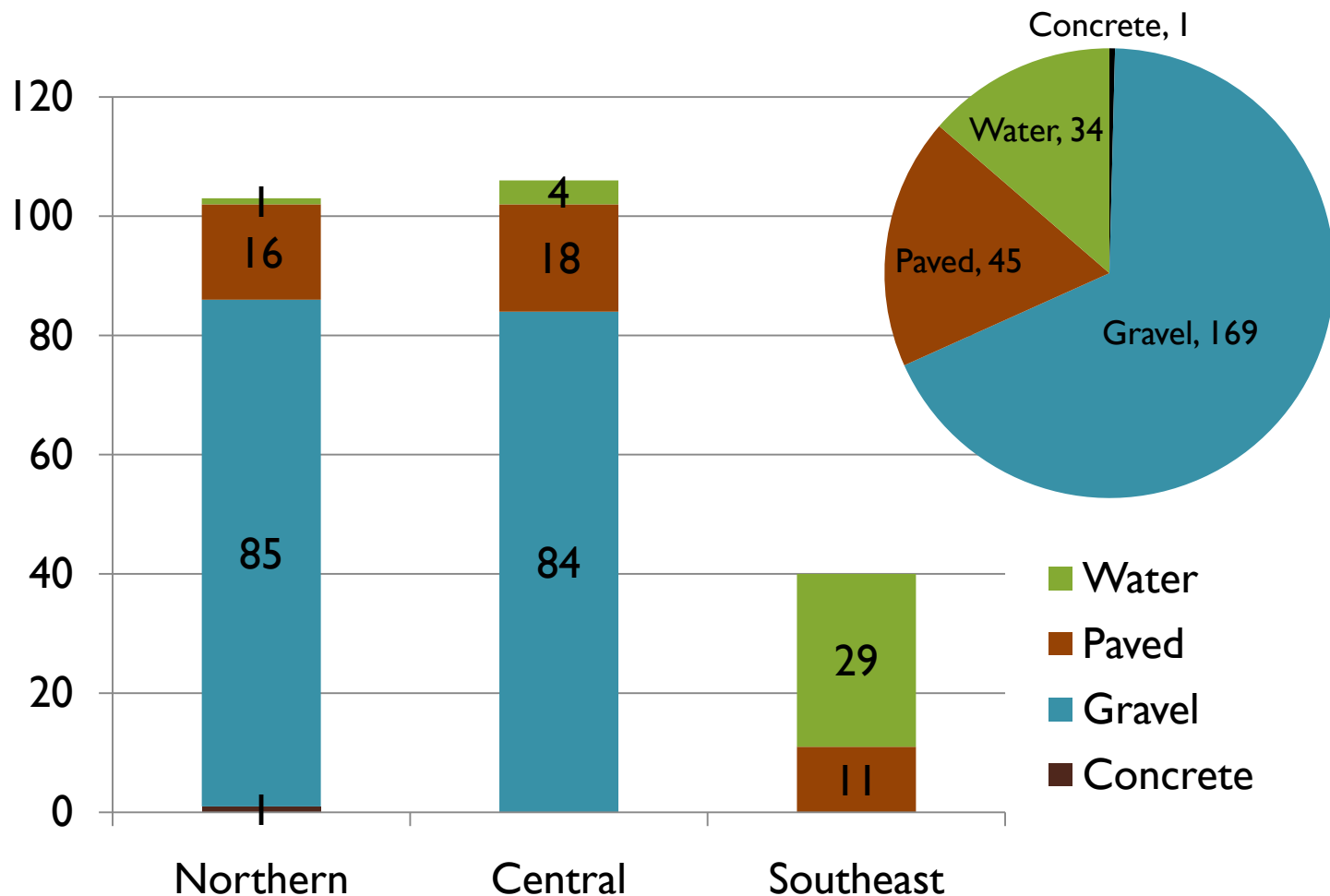
- Fairbanks MPO: \$856.1 m
- Anchorage Bowl: \$2,438 m
- Mat-Su Borough: \$1,200 m
- TOTAL: \$4.49 b

Grand Total: \$9.42 b

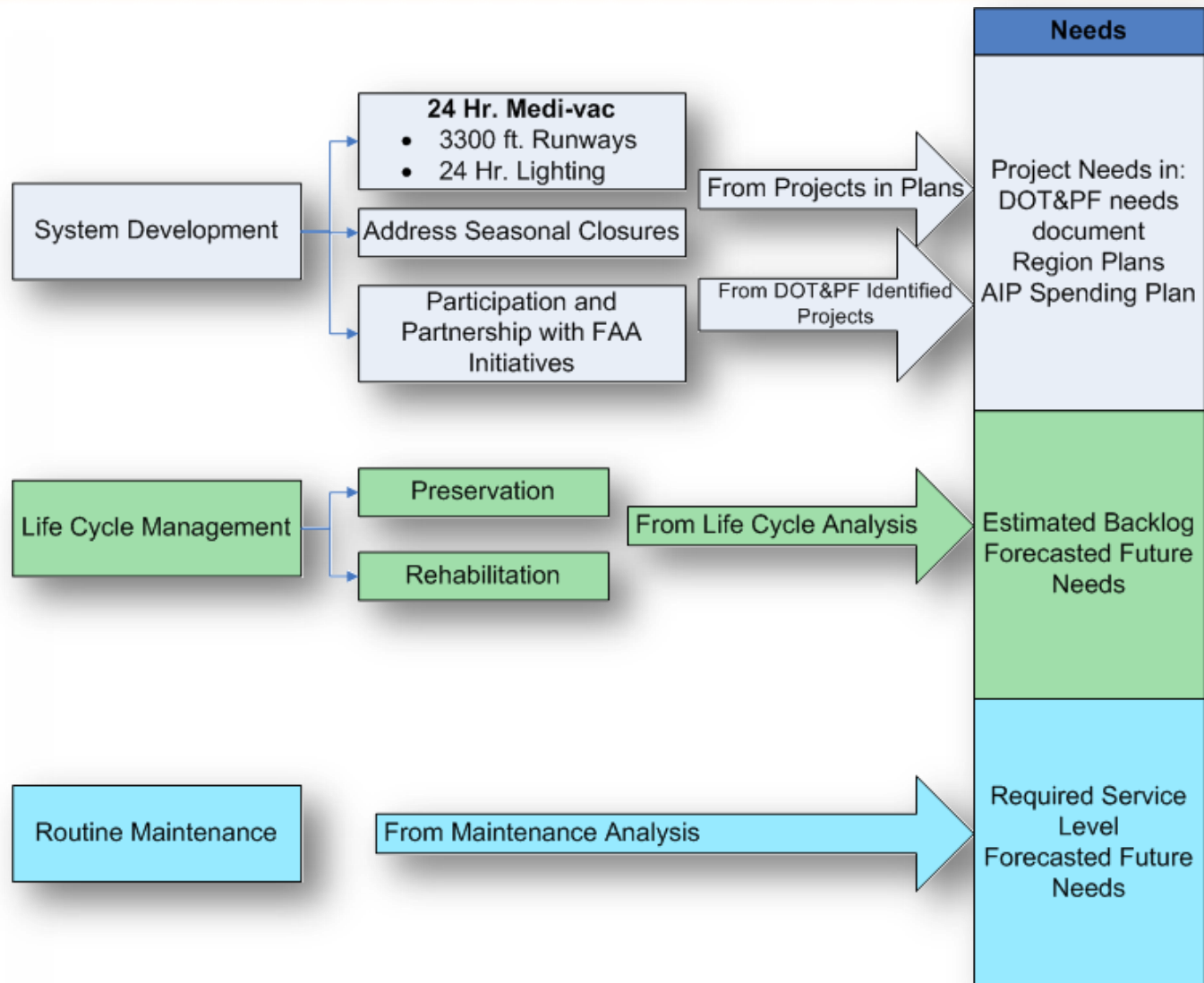
Highway System



Current Situation Alaska DOT&PF Airports



Airports Analysis Approach





- [illegible]

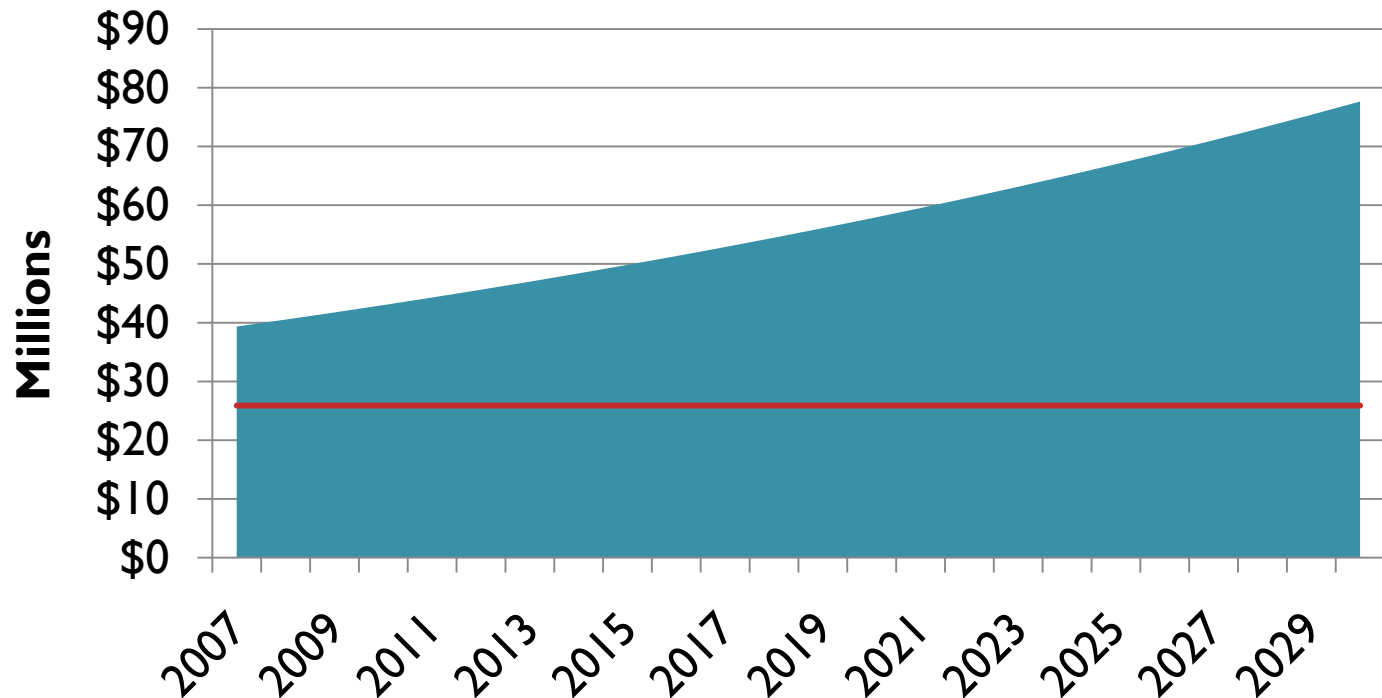
Airports

Routine Maintenance



- Routine maintenance currently under-funded by \$13.4 million – Affects service life

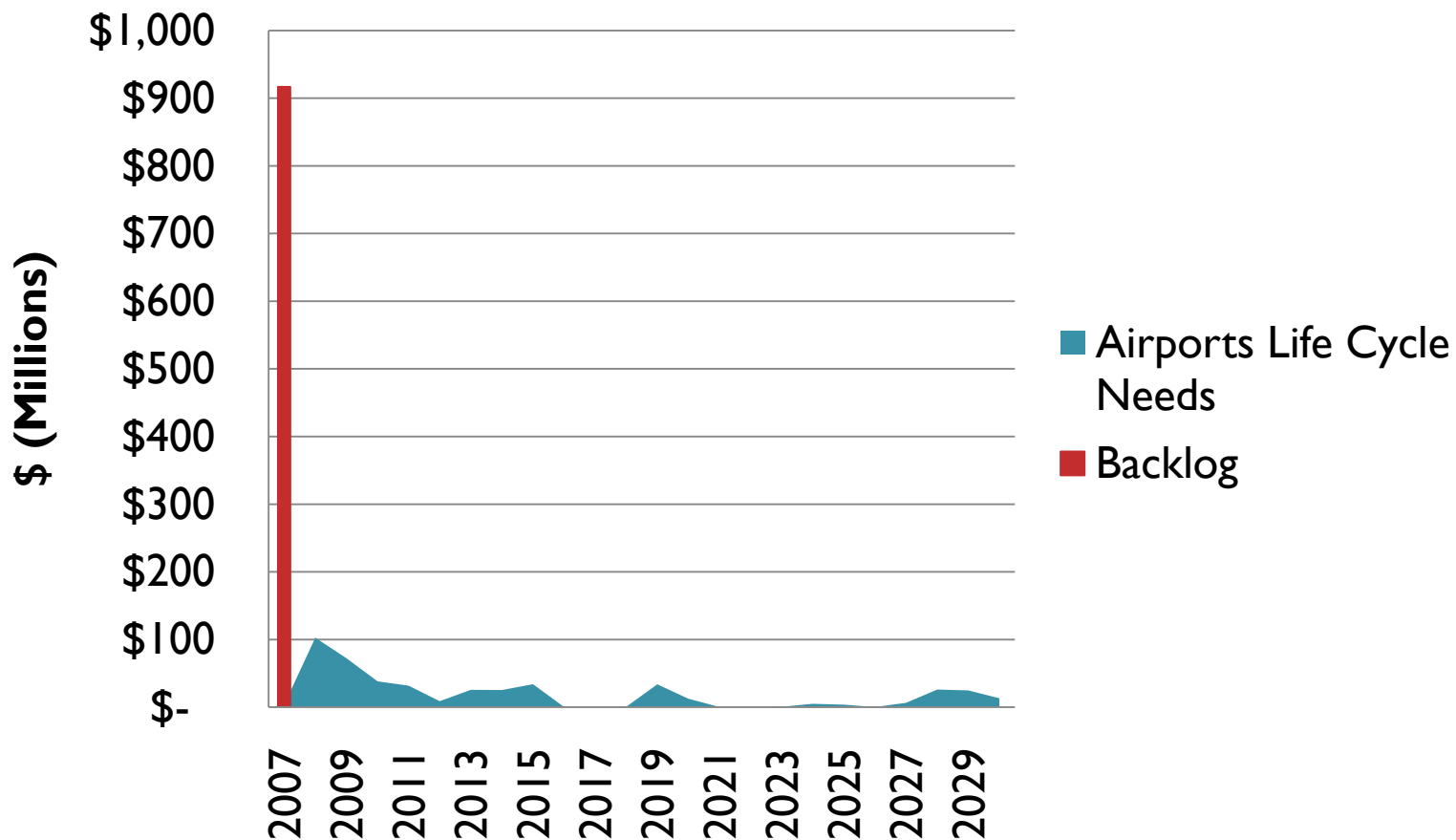
Airport Routine Maintenance Needs



Airports Life Cycle Management



Paved Airports- Large Backlog





Airports

Life Cycle Management

- Large and growing backlog of airport pavement needs
- Routine maintenance under-funding will increase backlog

Region	Percent of Runway Areas with PCI>70	Percent of Apron and Taxiway Areas with PCI>60
2004 Backlog		
Central Region	42%	52%
Northern Region	28%	41%
Southeast Region	39%	79%
Statewide DOT&PF	37%	53%
2006 Backlog		
Central Region	27%	50%
Northern Region	22%	23%
Southeast Region	36%	85%
Statewide DOT&PF	27%	48%



Airports

System Development Needs

3300 ft. runways: \$197.6 m

Seasonal closures: \$194.1 m

24 hr. lighting: \$2.2 m (Interim)

24 hr. lighting: \$31.1 m (Permanent)

TOTAL: \$425 m

Airports

Development Projects in Plans



Participation & partnership with FAA initiatives:
Addressed through FAA actions, grants and related
funding

Transportation Plans

- Prince William Sound/Copper River : \$.23 m
- Yukon Kuskokwim Delta : \$260.5 m
- Southwest Alaska : \$131.1 m

TOTAL: \$391.8 m

AIP Spending Plan: 1.1 b

GRAND TOTAL: \$1.92 b

Airports



Alaska Marine Highway System Ferries



Taku (1963)

Malaspina
(1963)

Matanuska
(1963)

Tustumena
(1964)

LeConte
(1974)

Columbia
(1974)

Aurora
(1977)

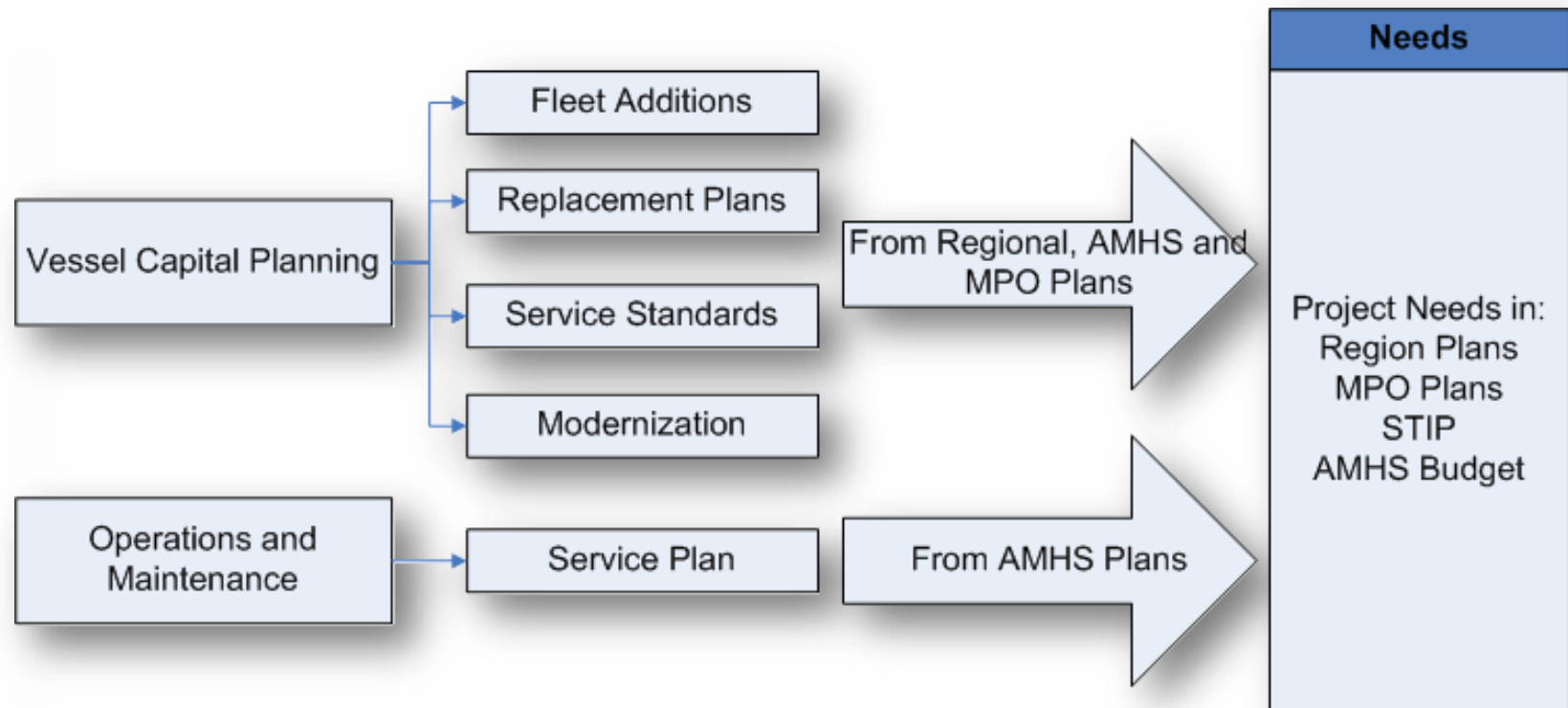
Kennicott
(1998)

Lituya
(2004)

Fairweather
(2004)

Chenega
(2005)

Alaska Marine Highway System System Approach



Alaska Marine Highway System New Vessels/Replacement From Plans



Transportation Plans

- Prince William Sound/Copper River :\$.2 m
- Southwest Alaska : \$10.9 m
- Southeast Alaska: \$341 m

STIP: \$144.2 m

TOTAL: \$469.3 m

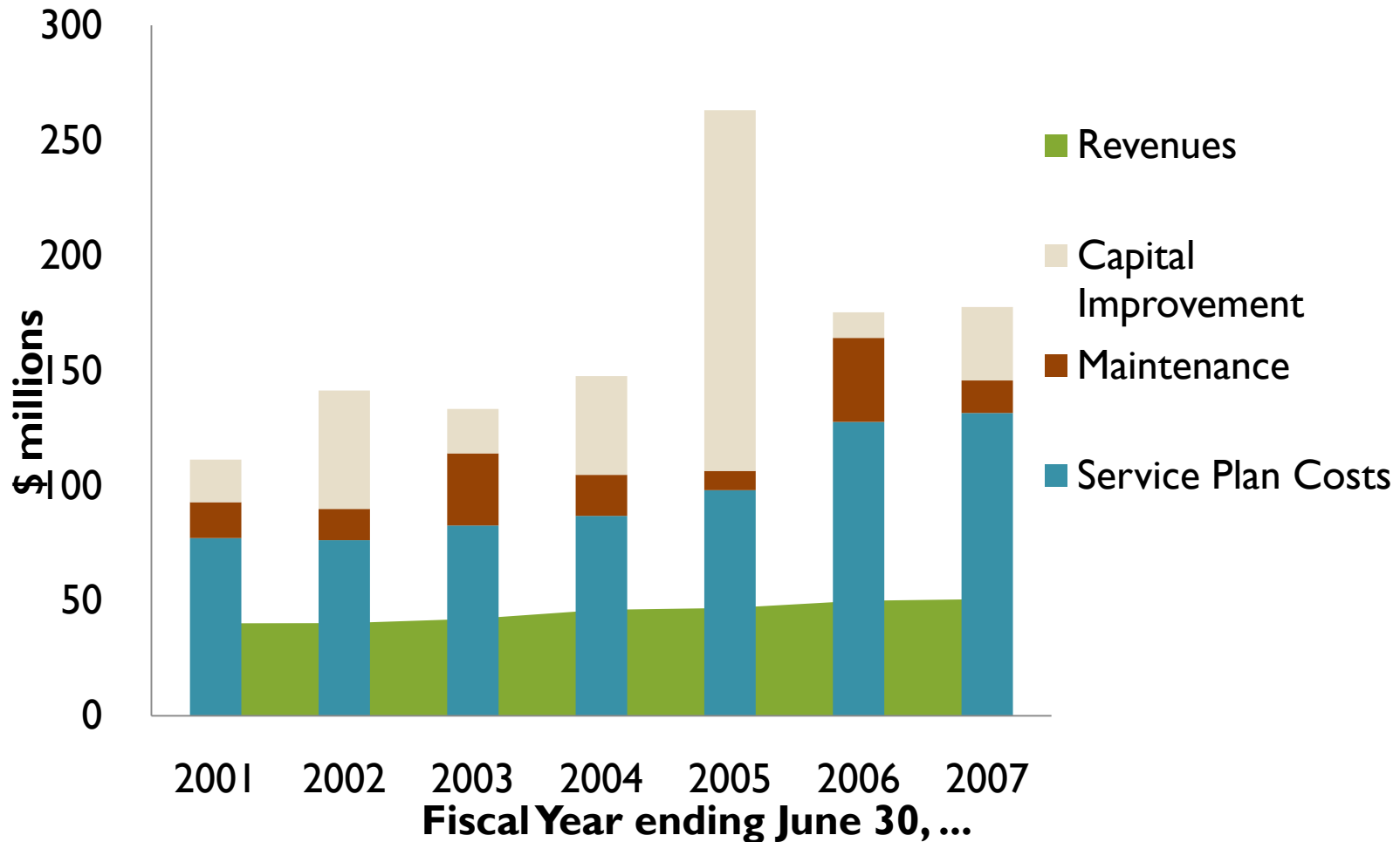
Alaska Marine Highway System New Vessels/Replacement From Plans



- Replacement
 - Vessels: approx cost
- Recertification
 - Vessels: approx cost

This is beyond 2010 – as that info is already in the STIP

Alaska Marine Highway System Financial Trends



Alaska Marine Highway System Plan Implementation



- Large subsidy on the service provided: costs far exceed revenues
 - User revenues not increasing in proportion to increased service levels
 - Current ferry service level likely not sustainable without large general fund subsidy
- Southeast Alaska transportation plan not followed
- “You can drive on a C- road, but cannot ride on a C- ferry (due to coast guard certification)”

Alaska Marine Highway System Operations and Maintenance Needs



- Maintenance/refitting
 - To be determined
- Address Coast Guard recertification
- Service costs: \$140 m (2007)

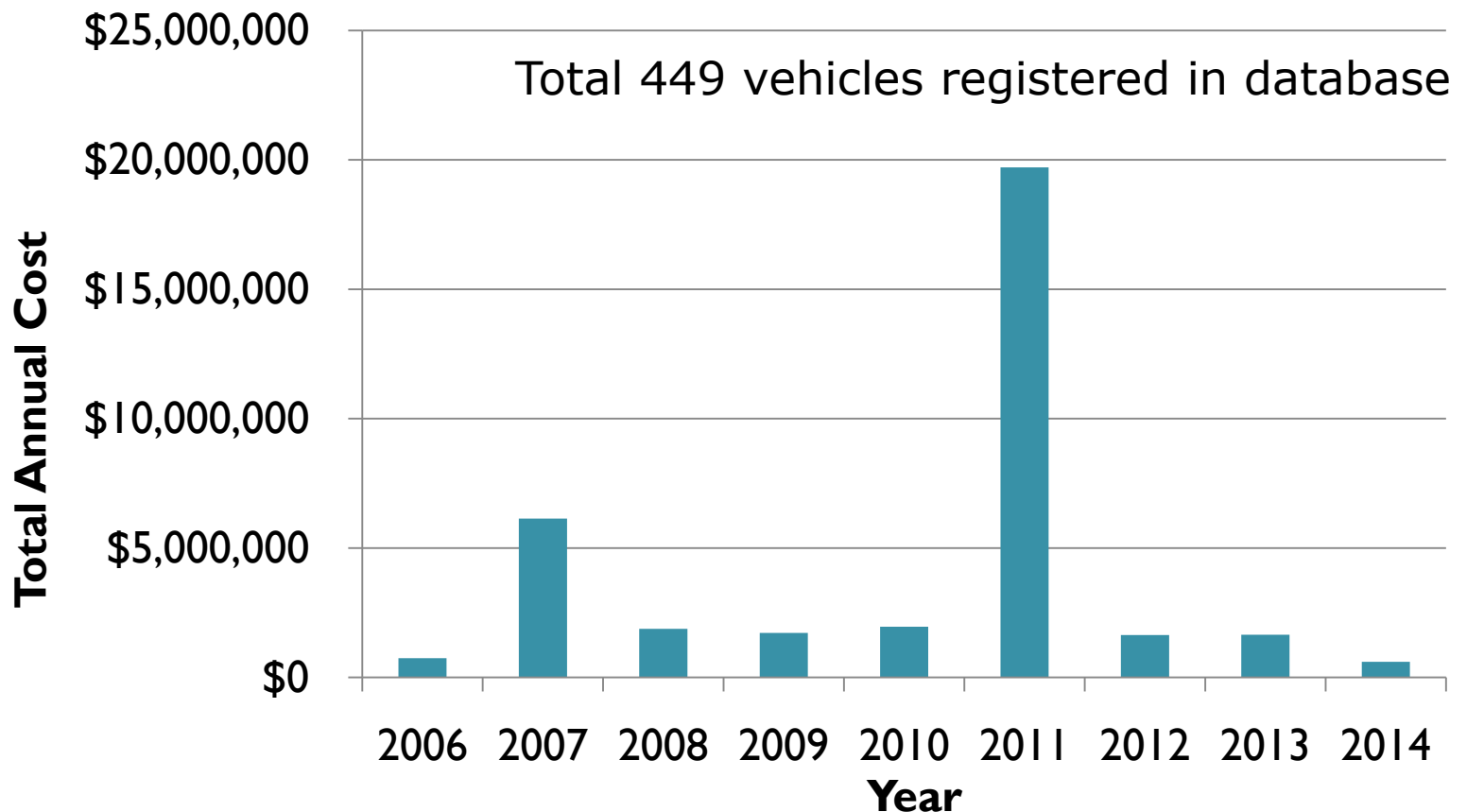
Alaska Marine Highway System



Transit Replacement Needs



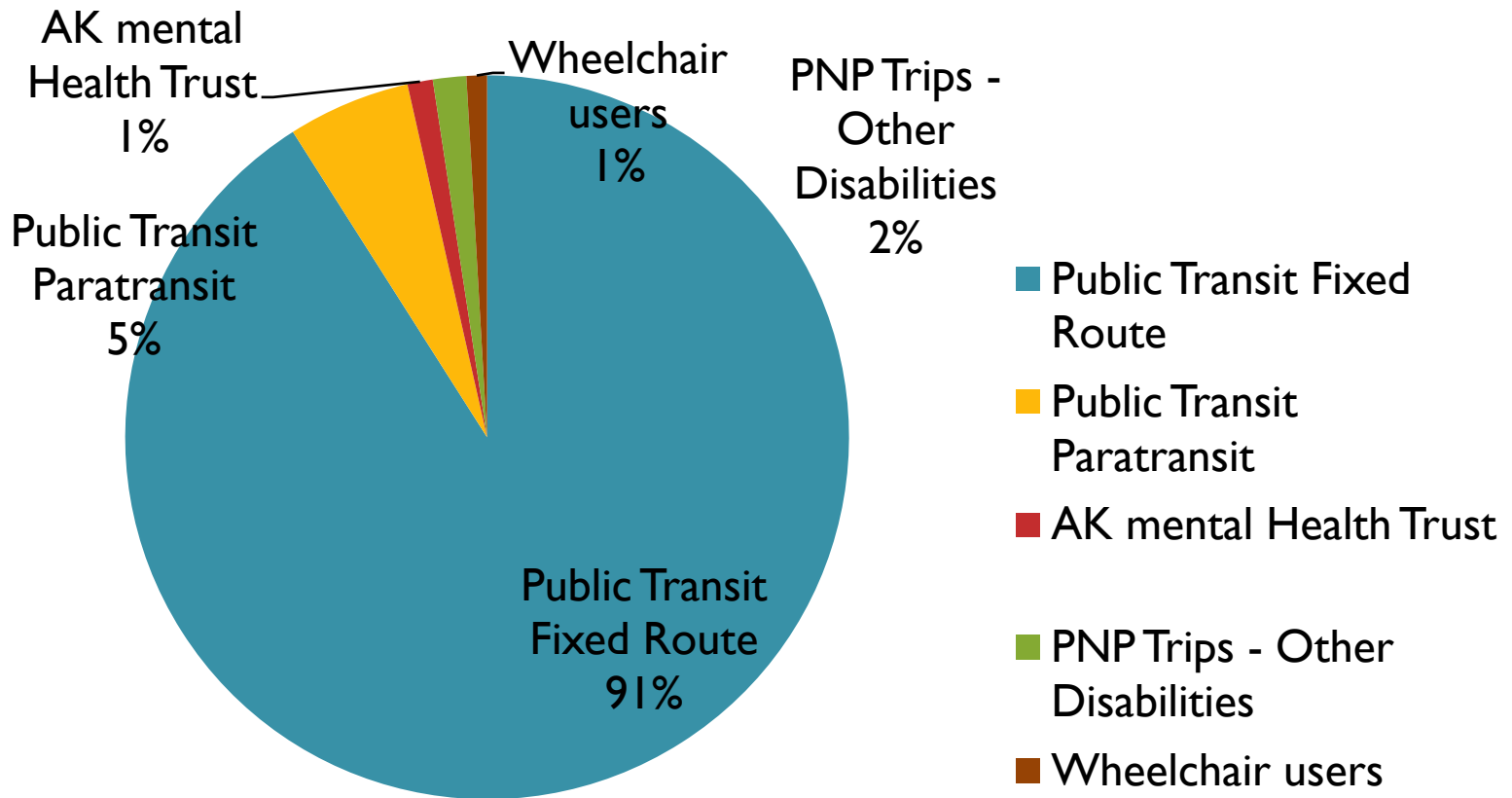
Alaska Transit Vehicle Replacement Costs



Transit 2006 Trips



2006 Alaska Transit and Paratransit Trips



Transit



VII. Wrap-up



VIII.Next Meeting Dates



VI. Questions/Comments

